PACIFIC PILOTAGE AUTHORITY

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PPA

SUMMARY OF THE CORPORATE PLAN

2018 TO 2022

INCLUDES:
Operating Budget 2018
Capital Budget 2018

Vision:

To be a world leader in marine pilotage

PACIFIC PILOTAGE AUTHORITY
CORPORATE PLAN
2018 TO 2022

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PACIFIC PILOTAGE AUTHORITY
CORPORATE PLAN
2018 TO 2022

1. Executive Summary

The Pacific Pilotage Authority has been challenged on many fronts in fiscal 2016. The marine industry that we serve struggled through another year with ongoing issues of overcapacity, limited cargo opportunities and record low charter and freight rates. These tough economic times have had a direct impact on the PPA and pushed us to find ways to keep our costs at a minimum whilst still maintaining our world class safety record.

After negotiations we came to an agreement with our strategic partners, the BC Coast Pilots Ltd. (BCCP), to realise a benefit in excess of $1 million that could be passed onto the shipping industry. This was a rollback in a contract that was previously agreed to by the BCCP. They understood the difficulties the industry was experiencing and wanted to assist as they understood that it is in everyone's best interest to keep the industry healthy.

We are proud to have worked collaboratively with all of our stakeholders and successfully represented the variety of interests of industry in 2016. We have agreed to work together and have built a sophisticated traffic, financial, and workforce planning model which will guide future manpower decisions and be used to directly address the Authority's financial exposure to fluctuations in pilot supply. The same model was used to gain support from our industry for the 2017 tariff to eliminate the objection we had regarding our proposed surcharge for fiscal 2016. We have used the same model to collectively agree on a proposed 2018 tariff.

At the same time, we continued to adhere to our corporate values of being innovative and in fiscal 2016 we proudly completed our first full year of dedicated marine helicopter pilot transfer service in Canada. The continued use of the helicopter program will depend on industry's support for the program and the ability to gain efficiencies ahead of a large energy proponent moving forward on the West Coast, which will require helicopter transfers in order to meet the efficiencies and minimum safety requirements that have been established. To this end, the program was suspended in fiscal 2017 as we wait for a large energy proponent to move ahead, and future use will depend on continued Industry support.

We completed 11,638 coastal assignments and 1,023 Fraser River assignments on the west coast of Canada in 2016. This translates to a 2% decrease in the number of ships moved as compared to 2015. Commodity market instability and the resulting reduction in world trade were the primary drivers of this decrease. We anticipate ending 2017 with 12,414 coastal assignments and 1,107 Fraser River assignments. This translates into a 7% increase in the number of ships moved as compared to 2016.

The two most important factors in meeting our mandate of providing a safe and efficient pilotage operation on the west coast of Canada are our safety record and the number of delays to vessels caused by the Authority. Our safety record on Canada's west coast remains extremely high with only five minor incidents reported in 2016 for a success ratio of 99.96%. With regard to delays our success ratio was 100% with no Authority related delays in the year. We will continue to

work with industry and the pilots in order to reach the elusive 100% success ratio both for safety and reliability.

This year we continued the fourth consecutive year of our planned run down of our surplus. As a result of this reduction we posted a deficit of $3.8 million in 2016. This action was planned and agreed upon by our Board of Directors in order to assist our customers and bring our reserves down. In fiscal 2017, we intend to implement tariffs which will moderately improve the Authority's financial position so that operating losses will occur, but cash flow losses will be turned into moderate gains. These actions were all planned through consultation and support from the industry we serve.

The grounding and subsequent sinking of the *Nathan E. Stewart* was a game changer for waiver holders on the west coast of Canada. In addition to a number of safety related changes, the Authority has also taken on the responsibility of actively monitoring the movements of non-piloted vessels on the coast until a more robust solution is developed and implemented. As a proactive measure, the Authority is also in the midst of performing a Waiver Risk Assessment in 2017.

We continued our outreach program in 2016 and 2017. We visited ports and communities to share information on the safety of shipping on the west coast of Canada and have actively sought out opportunities to showcase marine safety on the West Coast. To this regard, we continue to build trust and confidence in our world class services. We have hosted and participated in open houses explaining the role of the Pacific Pilotage Authority in maintaining marine and navigational safety and protecting the pristine waters of the BC coast.

The Authority will continue to pursue its mandate of providing a safe, efficient and cost effective pilotage operation on the west coast of Canada by meeting its strategic objectives and remaining committed to becoming a world leader in marine pilotage.

Our success is largely a result of the excellent relationship that we enjoy with our shareholders, the industry we serve and the pilots moving the vessels safely on our coast.

2. Mandate, Corporate Profile and Governance

2.1 Mandate

The mandate of the Authority is to establish, operate, maintain, and administer in the interest of safety, an efficient pilotage service within the regions set out in respect of the Authority, on a basis of financial self-sufficiency.

2.2 Corporate Profile

The Pacific Pilotage Authority was established February 1, 1972, pursuant to the *Pilotage Act*. The Pacific Pilotage Authority is a Schedule III, Part I (FAA) Crown corporation comprised of a Chair and six Board members appointed by Governor in Council.

The Authority is not an agent of the Crown.

2.3 Powers

To carry out its responsibilities the Authority has made regulations, approved by Governor in Council, pursuant to the *Pilotage Act* for:

1. Establishing compulsory pilotage areas,
2. Prescribing the ships or classes of ships that are subject to compulsory pilotage,
3. Prescribing classes of pilot's licences and classes of pilotage certificates that may be issued,
4. Prescribing the tariffs of pilotage charges to be paid to the Authority for pilotage services.

In addition, the Authority is empowered by the *Pilotage Act* to:

1. Employ such officers and employees, including licensed pilots, as are required,
2. Contract with a body corporate for the services of licensed pilots,
3. Make by-laws respecting the management of its internal affairs,
4. Purchase, lease, or otherwise acquire land, buildings, pilot launches and such other equipment and assets as may be required and to dispose of any such assets acquired.

2.4 Corporate Objectives

The Authority's Corporate Objectives are:

1. To provide safe, reliable and efficient marine pilotage and related services in the coastal waters of British Columbia, including the Fraser River,
2. To implement sustainable practices within the Authority and contribute to government's environmental, social and economic policies as they apply to the marine industry on the Pacific coast of Canada,
3. To provide the services within a commercially-oriented framework, by maintaining financial self-sufficiency, through a combination of cost management and tariffs that are fair and reasonable,
4. To achieve the highest productivity of the Authority's resources in the interest of safe navigation,
5. To assume a leadership role in the marine industry we serve, by facilitating decisions resulting in improvements to navigational safety and the efficiency of marine operations.

2.5 Vision Statement

The Authority's vision is to be a world leader in marine pilotage.

2.6 Mission Statement

The Pacific Pilotage Authority is dedicated to providing safe, efficient pilotage by working in partnership with pilots and the shipping industry to protect and advance the interests of Canada.

2.7 Corporate Values

Management and Board members review the Authority's Corporate Values annually to ensure their continued relevance and applicability. The Corporate Values are:

1. *Honesty/Integrity* - We will ensure honesty and integrity in everything that we do. We share responsibility for being effective, accountable and acting appropriately. We consider the outcome of decisions for all those affected before we implement change. We act with visible integrity and openness, and support each other in these actions.

2. *Positive Stakeholder Relations* - We will work hard to maintain positive relations with all stakeholders including the marine industry, the pilots and their respective organizations, our employees, the communities in which we operate and all other related individuals and organizations.

3. *Service Quality* - We strive for excellence in all our activities. We continuously learn, develop and improve. We take pride in our work and in the services we provide to our clients and partners.

4. *Accountability/Responsibility* - We are accountable, as individuals, team members and as an organization for our actions and our decisions. We make effective and efficient use of the resources provided to us. We adhere to our policies and procedures, our mission and objectives, and to the regulations governing us. When our commitment to innovation is at odds with existing procedures, we will work within the system to achieve positive change and improvement.

5. *Adaptability and Innovation* - We value innovation and creativity. We encourage and support originality and diversity of thought. As individuals and as teams, working with our internal and external partners, we welcome new ideas and methods to enhance our service and the use of our resources.

2.8 What is the Pacific Pilotage Authority

Commercial vessels of 350 gross tons or larger (pleasure vessels of 500 gross tons or larger), while travelling in Canadian compulsory pilotage waters, are legally obliged to use the services of a Canadian marine pilot as per the *Pilotage Act*. The Pacific Pilotage Authority is a federal Crown corporation whose mandate is to administer this service in the waters of western Canada. Our area of jurisdiction encompasses the entire British Columbia coast, extending approximately two nautical miles from every major point of land. This jurisdiction includes the Fraser River and stretches from Alaska in the north to Washington State in the south and is one of the largest in the world.

Marine pilotage is all about safety as it serves to protect the environment and thus the interests of the Canadian people. We hold ourselves accountable to the Canadian public in this regard.

2.9 Description of Operations

The Authority is responsible for providing safe, reliable and efficient marine pilotage in the coastal waters of British Columbia, including the Fraser River. The Authority has established five areas subject to compulsory pilotage.

When a vessel intends to enter compulsory pilotage waters on the British Columbia coast, it will initiate an order for a pilot at a specified time, date and boarding station. A pilot either contracted to or employed by the Authority will carry out this assignment. Pilots are boarded on vessels from a dock or by pilot launch or helicopter and are disembarked by pilot launch or helicopter when a vessel leaves pilotage waters.

The head office of the Authority is in Vancouver, British Columbia. Pilots are dispatched to their assignments through a central dispatch office in Vancouver and a traffic coordination office in Victoria.

During 2017, a workforce of approximately 114 contract pilots (86 full-time, 9 half-time and 19 seasonal) will provide coastal pilotage services to the Authority. We expect this number to be approximately the same in fiscal 2018. Additionally, there are eight employee pilots who pilot vessels on the Fraser River.

To provide pilots with water transportation to/from ships, the Authority operates pilot launches at three permanent boarding stations. These stations are at Victoria, Prince Rupert and Steveston which have employee-crewed launches.

Additionally, a contract launch is operated by a contractor at Pine Island (northern tip of Vancouver Island). The launch is financed by the Authority with financing provided in fiscal 2014 and fiscal 2015. The Authority implemented a launch replacement fee of $60 per launch which began in fiscal 2016 in order to recover the costs associated with this financing. The launch is owned and operated by the contractor and began service in October 2015. This station performed 407 pilot transfers in 2016 and annual pilot transfers are expected to increase to 434 per annum through fiscal 2022. The cruise industry is the major user of this station as it allows its vessels a high degree of route flexibility for Alaska cruises.

The Nanaimo Port Authority is also a contract launch operation carrying out pilot changes off Snake Island in the Nanaimo area.

On the west coast of Vancouver Island at Cape Beale, the Authority has a designated boarding station which services the Port Alberni region. The Authority has the flexibility to service this station by helicopter or by pilot launch.

During the year, the Authority continued the use of helicopter hoisting as an additional method of pilot transfer in the Prince Rupert area.

From a safety perspective, the most dangerous part of a pilot's job is the transition from a pilot boat to a ship's ladder; going from one moving platform onto another with both often moving at different vertical and lateral velocities. Worldwide, pilots have been seriously injured and have died in this process. A hoist equipped method of helicopter transfer significantly reduces the risk of injury to our pilots.

The Authority introduced this method of pilot transfer in fiscal 2015 with industry support when it seemed likely that a number of large energy projects would go online prior to fiscal 2020. From a financial perspective, the manpower costs of contract and employee pilots are the single largest expense of the Authority, making up more than 70% of the Authority's total expenses. Approximately 50% of a pilot's time is spent in transit. As a result, any method of transporting pilots faster would allow the Authority to maximize the efficiency of pilot supply and thus reduce the cost of a pilot per assignment catered to by the Authority.

For the safety of the energy vessels that were expected to come to our coast in the future, a Termpol process (a technical review focused on vessel safety and operations in Canadian waters along shipping routes) determined that it was imperative that the pilot boarding for energy vessels was performed by helicopters and carried out in locations that would be the safest for these classes of vessel. In the North this was determined to be 5 to 10 nautical miles northwest of the present pilot boarding station which meant that helicopter transfers this far out was the only viable solution.

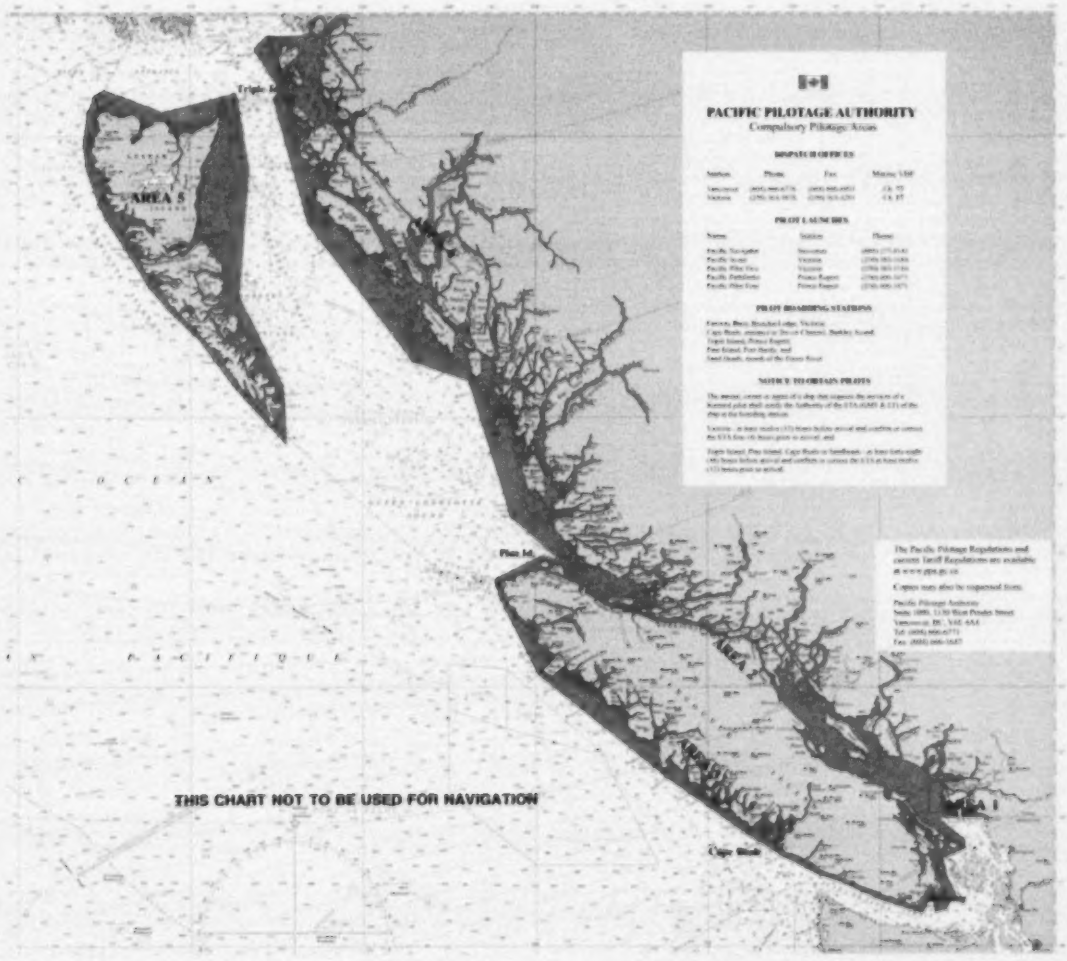
Helicopter transfers made up 36% of all northern transfers in fiscal 2016. In order to be viable on a long term basis, the transfer percentage would need to increase to approximately 65% of all northern transfers.

With energy project proponents delaying their final investment decisions across the coast, the Authority consulted with industry and elected to suspend the program in the North for the time being. Industry continues to consult with various helicopter operators with a view to determining the feasibility of continuing to provide this service in the South. The Authority intends to re-engage with helicopter providers if/when a large energy project moves ahead and requires a transfer point which brings costly inefficiencies to the existing launch program.

Helicopters will provide added opportunities to the Authority such as:

- Opening the door for helicopter transfers for pilots at Patos Island in the South (thus preventing the need to send a Canadian pilots into the U.S. and then having to sit alongside a U.S. pilot while a vessel sails toward Canadian waters, approximately a 10 hour loss of pilot time per assignment)
- Opening the door for possible transfers of pilots at Lord Rocks in the North, allowing vessels destined to/from Stewart to be catered to with a single marine pilot as opposed to the two it requires today (a significant cost savings to industry)
- Opening the door for pilot transfers to/from anchorages on Vancouver Island, especially if new anchorages are added further north on Vancouver Island. Today a pilot traveling to one of these anchorages needs to take a water taxi, a ground taxi and then a water taxi to get to their job (an approximate 4 hour process). A helicopter could facilitate this process in a fraction of the time it takes today.

The Authority's jurisdiction covers the entire coastline of British Columbia. Due to the vast size and the fact our coastal pilots are licensed for the entire coast we feel our operation is relatively unique in the world. We service all major ports on the coast as compared to other jurisdictions that may service only one port. As indicated in the following diagram, the most northern port we service is Stewart, to the north is Alaska, USA, and to the south is Washington State, USA.



Please refer to the Authority's fiscal 2016 Annual Report for further corporate information.
http://www.ppa.gc.ca/text/publications/Annual%20Report%202016.pdf

2.10 Corporate Governance

Corporate governance is the process of establishing and monitoring the policies and procedures which will ensure the appropriate stewardship of the business and affairs of the Authority, including financial viability.

Similar to other Crown corporations, the Pacific Pilotage Authority operates at arm's length from its sole shareholder, the Government of Canada. While the shareholder provides policy direction for the corporation's ongoing operations, as stated in the *Financial Administration Act*, the Pacific Pilotage Authority Board of Directors ensures that the corporation fulfils its mandate by setting the corporation's strategic direction, organizational goals, and monitoring their implementation. The Authority reports to Parliament through the Minister of Transport.

The Chair of the Board is appointed by the Governor in Council on the recommendation of the Minister of Transport and the Board of Directors is appointed by the Minister of Transport with the approval of the Governor in Council.

There are seven members on the Authority's Board of Directors comprising a Chair, two pilot representatives, two shipping industry representatives and two representatives of the public interest. This structure provides effective channels of communication and represents a good balance between the major stakeholders.

The Authority complies with the Treasury Board guidelines on corporate governance practices (guidelines on Board responsibilities, public policy objectives, communications, Board and management relations, Board independence, the position of the CEO, renewal of the Board, education of directors, compensation, and the responsibility for corporate governance). This includes Board self-assessments, a nomination committee for prospective Directors and the development of Directors' skills criteria.

In addition, the Board has constituted several committees to focus on the major areas of the Authority. These committees are chaired by a Board member, have terms of reference and mandates and report directly to the Board on a regular basis.

- Audit Committee - the Chair and three Board members are designated as members of the Audit Committee. The Audit Committee meets ten times per annum and members are expected to be financially literate. Its mandate includes responsibility for all financial matters, external audit, internal audit and insurance.

- Governance and Nominating Committee – this Committee meets four times per annum or at the call of the Committee Chair. Its mandate is to provide a focus on corporate governance, recommend candidates for Board membership as well as the Chair and CEO positions. This Committee also oversees new member Board orientation, the Board's self-assessment process, training and skills requirements, annual assessment of the Chair and succession planning of the Authority's management team.

- Human Resources and Compensation Committee – this Committee meets on an as needed basis or at the call of the Committee Chair. Its mandate includes responsibility for the CEO's performance management program reporting required by the Minister, executive development planning and management compensation. It is chaired by the Board Chair and includes an independent director of the Board.

- Pilot Training and Examination Committee (PTEC) – this Committee meets four times per annum and as required to conduct pilot exams. Its mandate is to conduct pilot examinations and review ongoing training programs for pilots. It is chaired by a pilot Board member and includes members of the Authority's management and BC Coast Pilots. The Committee is joined by one external examiner during annual pilot examinations.

- Pilot Transportation Safety Committee (PTSC) – this Committee meets at least twice per annum or more frequently as required. Members of this Committee regularly attend launch stations to observe drills and inspect safety equipment. The Committee is responsible for establishing safety standards and monitoring the safe operation of pilot launches, water taxis, airplanes and helicopters utilized in the transfer of pilots to/from ships. It also ensures that the Authority adheres to regulations and safe practices issued by Transport Canada. It is composed of BC Coast and Fraser River pilots, Authority management and pilot launch personnel.

- Safety and Operating Review Committee (SORC) – this Committee works in conjunction with the Navigation and Pilotage Committee of the Chamber of Shipping and meets four times per year. Its mandate is to review and assess pilotage practices and areas of concern and to seek solutions which result in improved safety and efficiency. It is chaired by an independent director of the Board and comprised of Authority management, BC Coast Pilots and members of the marine industry. The makeup of SORC will be adjusted in fiscal 2017.

- Enterprise Risk Management Oversight Committee (ERM) – this Committee meets at least semi-annually and is chaired by an independent director of the Board. The ERM system is designed to achieve the following:
    - Document, categorize and rank the Authority's risks in a risk register
    - Ensure every identified risk is maintained by a manager and/or Board committee
    - Confirm that the risk register is updated regularly in accordance with the review schedule
    - Ensure every risk is reported on by the risk owner on an annual basis
    - Assist and facilitate the Board of Directors in its strategic risk oversight role
    - Assist and facilitate the management team in its operational risk oversight role
    - Liaise with the other committees of the Board of Directors to ensure that mitigations are established for each of the identified risks as deemed necessary

2.11 Organizational Structure of the Authority

The Authority is managed by a CEO who reports to the Board through the Chair.

There are seven management employees, eight employee pilots, eleven dispatchers, six administrative and twenty-six launch employees.

One hundred and fourteen entrepreneur marine pilots provide coastal pilotage services through their company, The British Columbia Coast Pilots Ltd (BCCP).

The Authority's organization chart indicates the reporting structure.

The Authority has prepared succession plans for the senior management positions. These plans outline the recruitment process, skills criteria and timelines in the event of personnel change.

2.12 Launch Stations and Office Facilities

In Victoria the Authority leases water lot property from the Greater Victoria Harbour Authority, at Ogden Point, in order to accommodate two pilot launches, floats and a workshop. In addition to the launch operation there is also a traffic coordination centre which is in a building owned by the Authority.

In Steveston, the Authority leases dock space from the Steveston Harbour Authority for one pilot launch.

In Prince Rupert, the Authority leases water lot space from the Prince Rupert Port Authority for a floating dock. The floating dock is equipped with a small work shed and accommodates one pilot launch. The Authority also leases dock space from the Port Edward Harbour Authority for one pilot launch.

2.13 Pilot Launches

The Authority's pilot launch fleet consists of five specially designed pilot launches. The Authority has implemented an enhanced planned maintenance program, which will ensure all service and safety demands are met in a timely, orderly and cost effective fashion. All launches are on a four-year Transport Canada inspection cycle. The newer launches perform the majority of the boardings with the older vessels being used mainly in a back-up role.

Pilot Launches	Station	Date Built	Size
Pacific Pilot Two	Victoria	1971	19.8 m
Pacific Pilot Four	Prince Rupert	1973	19.8 m
Pacific Pathfinder	Prince Rupert	2003	22.4 m
Pacific Navigator	Steveston	2008	19.5 m
Pacific Scout	Victoria	2008	19.5 m

The Authority financed the purchase of a pilot launch in 2014 to replace the aging launch that services the Pine Island area. This launch entered service on October 29, 2015 (refer to section 2.9 for more information).

The Authority has prepared a Launch Replacement Program which ensures a steady supply of launch services for the industry we serve through fiscal 2030.

2.14 Government Policies and Applicable Legislation

The Authority continues to comply with the requirements of the *Pilotage Act*, the Human Rights Commission, the *Canadian Multiculturalism Act*, the *Employment Equity Act*, the *Official Languages Act*, the Federal Identity Program, the *Canadian Environmental Assessment Act*, the *Financial Administration Act – Section X* and the *Access to Information and Privacy Act*.

2.15 Enterprise Risk Management

An Enterprise Risk Management (ERM) program has been incorporated as part of the Authority's strategy and is well advanced in 'cultivating a culture of risk awareness' throughout the organization. All areas of the Authority's operations have been incorporated into this program, including contract and employee pilots, launches, dispatch and administration. Risks are designated by the ERM Oversight Committee as either operational or strategic. Operational risks are assigned to the appropriate management staff for mitigation and review. Strategic risks are overseen by the Board, and are actively managed and mitigated by the appropriate Board Committee.

The ERM Oversight Committee is chaired by a Board member and includes representation from each of the areas mentioned above. The Committee reports to the Board, oversees scenario planning/emergency preparedness exercises, and reviews the risk registry to make sure it is accurate and up to date. The Committee assigns relevant risks to specific committees and managers to review on an ongoing basis. The committees' staff and Chair sit on the ERM Oversight Committee and report on risks to that Committee as well as directly to the Board in their Board reports. In addition, the whole Board actively scans for new and emerging risks at the Authority's annual strategic planning exercise as well as throughout the year at regularly scheduled meetings.

The Authority remains committed to ensuring all risks have appropriate mitigation measures in place that are reviewed on a regular basis. Detailed risk descriptions and mitigation measures are kept current by the risk owners and are part of a comprehensive risk document. They are not all included in this report due to their length (except for the first three to show examples of the mitigation strategies and controls). As a general rule, the risks rated high are reviewed at least once every three months, risks rated medium are reviewed at least once every six months and risks rated low are reviewed at least once every year. Additionally, risk owners, who are members of the management group, are required to make annual presentations of their risk(s) to their assigned committees and the Board reviews the full risk registry on an annual basis.

Risk Categories

The Authority has categorized its risks in order to assist in identification and management of the risk.

- Strategic risk: risks emanating from the Authority's strategy and decision making.
- Financial risk: risks pertaining to liquidity, capital availability, capital structure.
- Organizational risk: risks emanating from the Authority's management of its human resources including leadership depth and quality, management and labour availability and cost, cultural, etc.
- Operational risk: risks emanating from the Authority's day-to-day operating processes and activities.
- External risk: risks emanating from external sources over which the Authority (although impacted) has little control (e.g. macro-economic volatility; industry structural change; political, etc.)
- Legal and regulatory risk: risks associated with the Authority's compliance with applicable laws and regulations.
- Incident risk: risks emanating from incidents (accidents, near misses, etc.) within the Authority's jurisdiction where a pilot is present on board ship.
- Emerging risks: un-rated risks that the Authority will keep reviewing from time to time in order to be proactive.

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Risk Ranking Methodology

The Authority categorizes risks on the basis of the following chart. Similar to the risks themselves, these limits are reviewed on a regular basis.

Impacts	Financial	Operational				Strategic	
		Human	Property	Vessel(s)	Environmental	Reputation	Disruption of Business
Extreme 5	Above $10 million cash impact on the Authority	Multiple deaths And multiple people with serious long-term injury Intensive care	Damage to property is such that it ceases operations for a period of time exceeding one month or financial loss exceeds $10 million	Vessel sinks or sustains so much damage that it is a constructive total loss	Incident causes sustained long term harm to environment (i.e. damage lasts greater than a month)	Sustained front page adverse national media coverage International media coverage	Threatens long-term viability of Authority (Operational cessation or major operational issues lasting more than one month)
Very High 4	Impact on the Authority between $5 and $10 million	Single death And multiple people with serious long-term injury Intensive care	Damage to facilities is such that operations cease for up to one month or financial loss of $5 - $10 million	Vessel sustains damage significant enough to result in towing to dry dock and loss of operations of up to one month	Incident causes sustained medium term harm to environment (i.e. damage lasts up to one month)	Front page adverse national media coverage and intermittent international coverage	Threatens viability of Authority in the medium term (Operational cessation or major operational issues lasting up to one month)
High 3	$1 - $5 million cash impact	Some people with serious long-term injury and multiple minor injuries	Damage to facilities is such that the operations cease for up to two weeks or financial loss of $1 - $5 million	Vessel sustains significant damage with dry docking and loss of operations for two weeks	Incident causes medium term harm to environment (i.e. damage lasts up to two weeks)	Intermittent adverse national media coverage	Threatens viability of Authority in the short term (Operational cessation or major operational issues lasting up to two weeks)
Medium 2	Between $500,000 to $1 million cash impact	One person with serious long-term injury Some minor injuries	Damage to facilities cause operations to cease for up to one week or financial impact of $500,000 - $1 million	Vessel sustains damage resulting in loss of operations for one week	Incident causes short term harm to environment (i.e. damage lasts no greater than one week)	Sustained front page adverse local media coverage Board and Ottawa receive complaints from industry associations and major clients	Operational issues lasting up to one week but no cessation of business
Low 1	Up to $500,000 cash impact	Single or multiple minor injuries requiring on site first aid and/or off-site treatment	Damage to facilities cause operations to cease for up to 72 hours or a financial impact up to $500,000	Minor damage with no effect or damage resulting in a loss of operations of no more than 72 hours	Incident causes minimal or intermittent harm to environment over a period of time (i.e. damage lasts no greater than a day)	Intermittent adverse local media coverage Complaints received from industry associations and/or clients	No operational issues or operational issues lasting up to 72 hours

Note: Due to the naming of the risk ranking methodology defined above, a high impact risk with a high likelihood would result in a medium overall risk (high being a median impact risk on the scale of low to extreme).

The risk table shows the current risks and ranking status as of this report.

Priority	Title	Org Level	Risk Category	Impact	Likelihood	Score
1	Ports and or Terminals Significantly Changing the Way they do Business	Operations	Financial Risk	High	High	Medium
2	Pilotage Waivers	Operations	Compliance Risk	High	High	Medium
3	Governance Risk	Strategic	Compliance Risk	High	High	Medium
4	Length of Pilotage Assignments Between Vancouver and Victoria	Operations	Financial Risk	High	High	Medium
5	Open lines of communication with First Nations, NGOs & the general public	Strategic	Communication Risk	High	High	Medium
6	Hazardous, Dangerous or Toxic Cargo	Operations	Marine Incident Risk	Very High	Medium	Medium
7	Dispatch department knowledge loss and succession planning	Operations	HR Risk	High	Medium	Medium
8	Management Succession	Strategic	HR Risk	High	Medium	Medium
9	Recruiting and Training of Launch Crew	Operations	HR Risk	High	Medium	Medium
10	Recruiting and Training of River Pilots	Strategic	HR Risk	High	Medium	Medium
11	Human Resource Management for the PPA	Operations	HR Risk	High	Medium	Medium
12	Conflict of Interest	Strategic	Reputation Risk	High	Medium	Medium
13	Risks associated with HOLDCO	Strategic	Financial Risk	High	Medium	Medium
14	Pilots Transfers Via Helicopter Hoisting	Strategic	Marine Incident Risk	High	Medium	Medium
15	IT Vendor Issues	Operations	IT Risk	Medium	High	Medium

Priority	Title	Org Level	Risk Category	Impact	Likelihood	Score
16	Maintaining Good Stakeholder Relationships with the Marine Industry	Strategic	Stakeholder Risk	Medium	High	Medium
17	Disaster and Emergency Planning	Operations	Emergency Risk	Extreme	Low	Medium
18	Delay of Vessel due to External Issues	Operations	External Risk	Low	Extreme	Medium
19	Future Recruitment of Suitable Qualified Pilots	Strategic	HR Risk	Very High	Low	Low
20	Economic Health of BC Coast Pilots Ltd	Strategic	Financial Risk	Very High	Low	Low
21	Training of BC Coast Pilots	Operations	Marine Incident Risk	Very High	Low	Low
22	General Safety of Pilots	Operations	Safety/Well Being Risk	Very High	Low	Low
23	Labour Management – Fraser River Pilots	Operations	HR Risk	Very High	Low	Low
24	Failure of Key IT Applications	Operations	IT Risk	Medium	Medium	Low
25	Telecommunications Failure (Voice and Data systems)	Operations	IT Risk	Medium	Medium	Low
26	General Safety of PPA Launch Crew	Operations	Safety/Well Being Risk	Medium	Medium	Low
27	Changing Economic and Financial Conditions and Political Issues Affecting Traffic Volume	Strategic	Financial Risk	Medium	Medium	Low
28	New Technology and Subsequent Training - Pilots	Strategic	Marine Incident Risk	Medium	Medium	Low
29	Main Office Security	Operations	Safety/Well Being Risk	Medium	Medium	Low
30	New Technology and Subsequent Training - Non-pilot	Operations	IT Risk	Medium	Medium	Low
31	Accounts Receivable	Operations	Financial Risk	Medium	Medium	Low

Priority	Title	Org Level	Risk Category	Impact	Likelihood	Score
32	Delay of Vessel due to the PPA	Operations	Stakeholder Risk	Low	Very High	Low
33	Labour Management - ILWU	Operations	HR Risk	High	Low	Low
34	Pilot Protocols and Participation in an Incident	Strategic	Marine Incident Risk	High	Low	Low
35	Drugs and Alcohol	Operations	Safety/Well Being Risk	High	Low	Low
36	Internal and External Fraud	Operations	Financial Risk	High	Low	Low
37	Communication During an Incident (Media)	Operations	Communication Risk	High	Low	Low
38	Labour Management - Launch Crews	Operations	HR Risk	High	Low	Low
39	Communication During an Incident (Government)	Strategic	Communication Risk	High	Low	Low
40	Incident Management Coordination Across Borders	Strategic	Communication Risk	High	Low	Low
41	Pandemic	Operations	Emergency Risk	High	Low	Low
42	Security of Physical Assets	Operations	Financial Risk	High	Low	Low
43	Coordinating Multiple Investigations as a Result of a Cross-Jurisdiction Incident	Strategic	Communication Risk	High	Low	Low
44	Financial Reserve - Tariff	Strategic	Financial Risk	Low	High	Low
45	Maintaining Good Stakeholder Relationships with Pilots	Strategic	Communication Risk	Medium	Low	Low
46	Maintaining Good Stakeholder Relationships with the Shareholder	Strategic	Stakeholder Risk	Medium	Low	Low
47	Financial Control Systems	Operations	Financial Risk	Medium	Low	Low

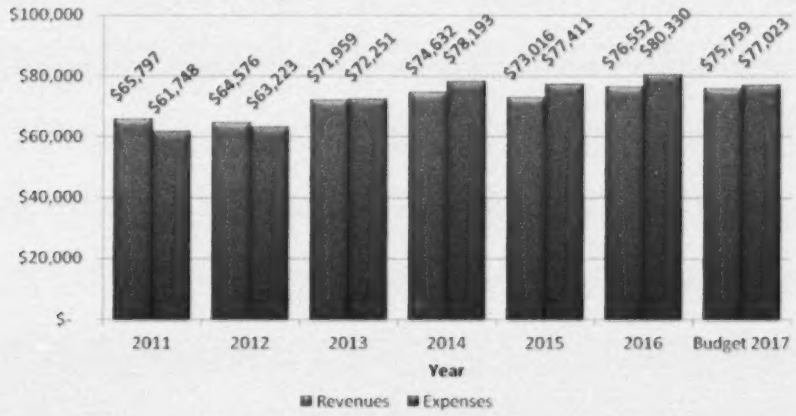
Priority	Title	Org Level	Risk Category	Impact	Likelihood	Score
48	Compliance with Regulations and Legislation	Strategic	Compliance Risk	Medium	Low	Low
49	Incident Management Coordination within Canada	Strategic	Marine Incident Risk	Medium	Low	Low
50	Risks associated with a single-contractor relationship	Strategic	HR Risk	Medium	Low	Low
51	General Health & Safety of PPA Offices (Vancouver and Victoria)	Operations	Safety/Well Being Risk	Low	Medium	Low
52	Recruiting and Training of Administration Staff	Operations	HR Risk	Low	Medium	Low
53	Special Events Planning	Operations	Financial Risk	Low	Medium	Low
54	Accounts Payable	Operations	Financial Risk	Low	Low	Low

3. Financial Position, Strategic Issues & Environment

3.1 Assessment of Financial Performance for 2016

For 2016 the Authority recorded consolidated revenues of $77 million and a net loss of $3.7 million, most of which was budgeted for.

Revenues and Expenses by Year ($000's)



From a traffic standpoint, 2016 fell below the prior year by 231 assignments ending the year at 11,638 coastal and 1,023 Fraser River assignments. In total this is a 2% traffic decrease from 2015.

Traffic losses were noted in the commodity sectors including coal (5%), forest products (7%), containers (1%) and grain (8%) while increases were noted in the cruise sector (3%). The grain sector was our most substantially affected sector in fiscal 2016 with an 8% reduction in traffic as compared to fiscal 2015. However, the grain volumes of the fourth quarter in fiscal 2016 exceeded the comparable last quarter of fiscal 2015 by 10%. This increase reflects a substantial bumper crop for fiscal 2016 which began to ramp up in August 2016.

The Authority's customer base continues to be well diversified and as such, the impacts of significant single sector changes are not as magnified in the Authority's overall volumes. The Authority is very dependent on export of resource commodities to Asian markets and the slowdown in these markets in fiscal 2016 was a significant contributing factor to our overall decrease in volumes.

On January 1, 2016, the Authority implemented a 2.75 percent tariff increase (2.5 percent in 2015) with the written support of industry. The increased tariff was intended to partially fund increased contractual costs from service and collective agreements that were in place for the entire year. The tariff was designed to partially fund impending losses from locked-in collective

agreements and service contracts so that virtually all remaining surpluses in the Authority would be effectively eliminated and returned to industry (through the lower tariff) for fiscal 2016.

The 2016 actual financial results were a combination of a number of factors which resulted in the loss for the year. The most significant variances to budget are explained below:

1. Coastal pilotage revenues in 2016 fell below the budget by $568,000 (1% below budget). This was mainly due to a decrease in traffic levels. In fiscal 2016, coastal traffic assignments were 11,638 versus a budget of 11,767 assignments.

   The unfavorable coastal revenue variance noted above has to be adjusted by decreased contract pilot fees as the coastal pilots are paid per assignment. The coastal pilotage expenses were 3% below budget due to the lower volumes as well as the successful negotiation between the Authority and the BCCP which resulted in the BCCP providing relief in the already agreed to fee increases for fiscal 2016.

   Apprentice pilot costs are included in pilot training and this segment ended the year at $1.5 million, $394,000 unfavourable to budget. Senior pilot training ended the year at $700,000, $108,000 favourable to budget. The costs of training pilots will vary from year to year given the availability of pilots, seniority and the training not yet undertaken. As such, fluctuations in the costs are common and tend to even out over a 7 year period.

   Once the revenues and expenses discussed above are factored into account, this sector's contribution margin increased to 3%, representing a surplus of $1.6 million.

2. River pilotage revenues fell below the 2016 budget by $82,000 (3%). This was mainly due to a decrease in traffic levels of 8% (1,023 actual assignments versus 1,111 budgeted). The costs of the River pilots fell below budget by $199,000 (8%), in line with volume decreases. These volume decreases resulted in lower overtime and callback payments to salaried pilots, which resulted in decreased wages. This sector's contribution margin increased to 21%, representing a surplus of $636,000.

3. Travel revenues fell below budget by $118,000 (2%); which was in line with the decrease in overall traffic levels. The decreased revenue was offset by increases in costs associated with transporting pilots to/from assignments of $195,000. In total this sector's contribution margin decreased to 18%, representing a surplus of $1.3 million.

4. Pilot launch and helicopter revenues are traffic driven and these operations are a negative margin segment of our business. In 2016, the employee crewed stations at Brotchie, Sand Heads and Triple Island as well as the contractor crewed stations in Port Hardy and Prince Rupert generated revenues of $151,000 (1.5%) above budget. The costs of this segment decreased by $130,000 below budget. In total this sector's contribution margin remained at a budgeted (12%) of revenue, or a loss of $933,000.

   Included in pilot launch revenues is a contract launch operation that generated revenues of $50,000 above budget. The operator is paid by the trip so the increased revenue is as a result of increased usage of the contractor's operation.

Also included in launch costs are the costs of the helicopter program in Prince Rupert. The helicopter program ended the year costing the Authority $1.3 million, $263,000 unfavourable to budget. This was driven primarily by the fact that helicopter hours and fuel utilized per assignment were higher than original expectations.

5. Total overhead costs ended the year $152,000 (2%) below budget. Overall, this sector generated expenses of $6.4 million, below budget at 8% of revenue. This is as a result of a significant cost containment focus by the Authority, without sacrificing safety.

The table below details the comparisons of the major revenue and expense categories for the Authority's unconsolidated financial statements (unaudited and excluding Holdco) along with the 2016 budget and 2015 fiscal period.

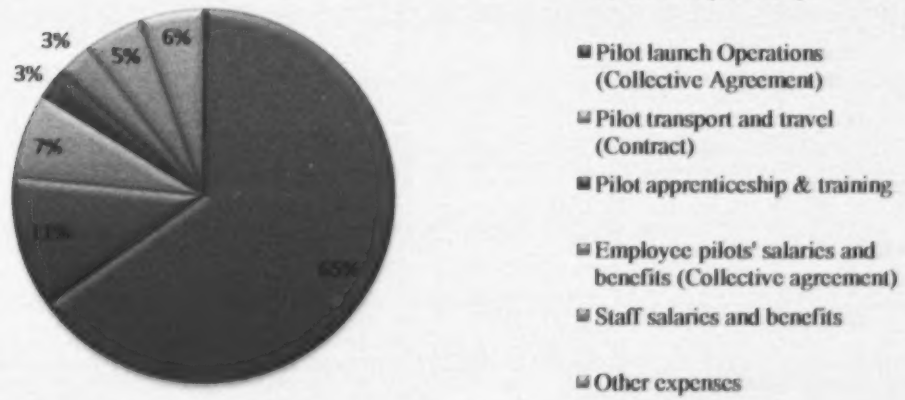
Revenue Categories (000's):	Actual 2016	Budget 2016	Variance to Budget	Actual 2015
Coastal pilotage	$55,859	$56,427	($568)	$53,853
River pilotage	$3,014	$3,096	($82)	$3,015
Travel	$7,134	$7,253	($118)	$6,812
Launch	$10,160	$10,009	$151	$9,114
Other income	$117	$779	($662)	($25)
Total Revenues	$76,284	$77,564	($1,280)	$72,770
Expense Categories (000's):				
Contract pilots' fees	$52,156	$54,370	($2,214)	$50,731
Pilot launch costs	$9,848	$9,533	$316	$9,591
Transportation and travel	$5,873	$5,678	$195	$5,621
Staff salaries and benefits	$3,968	$3,847	$121	$3,869
Employee pilots' salaries and benefits	$2,439	$2,577	($138)	$2,421
Other expenses	$3,636	$4,604	($968)	$3,321
Pilot training	$2,159	$1,872	$287	$1,810
Total Expenses	$80,079	$82,480	($2,402)	$77,365
Net Income (Loss)	($3,794)	($4,916)	$1,122	($4,595)
Net Income (Loss) excluding launch and PPU fees	($3,794)	($4,916)	$1,122	($4,595)

Since inception in 1972 the Authority has been financially self-sufficient and continues to structure its finances to maintain this position.

The exhibit below compares the major expense categories as a percentage of total expenses for the year 2016.

Similar to prior years, approximately 90 percent of the Authority's total annual expenditures for the year were covered by either a service contract or collective agreements.

Actual Expense Categories 2016



GST Assessment

The Authority's prepaid expenses and other receivables include $736 in GST recoverable for fiscal 2016, currently under dispute with Canada Revenue Agency (CRA). In relation to the fourth quarter of 2015, CRA assessed that the Authority should have collected GST on pilotage fees charged to foreign vessels, represented by domestic shipping agents, on the basis that such services are non-zero rated. During 2016, CRA applied a portion of the Authority's 2016 GST return refunds against the $736,000 balance it had assessed.

The Authority has filed a Notice of Objection (NOO) related to CRA's assessment. The pilotage fees charged by the Authority are payable by the owners of the vessels at issue, who are non-registered non-resident commercial corporations, not the shipping agents. Accordingly, the Authority has assessed the services it provides as zero-rated under the *Excise Tax Act*.

An unfavourable CRA ruling could potentially result in retroactive and/or prospective application of the CRA's position. The Authority, in consultation with tax specialists, has assessed the likelihood of an unfavourable ruling as remote. The Authority expects to fully recover the GST balance; however, the timing for the resolution of the NOO is unknown.

3.2 Assessment of Financial Performance for the first half of 2017

For the half year ended June 30, 2017, the Authority completed 6,643 pilotage assignments, an increase of 539 assignments (9%) when compared to budget and an increase of 494 assignments (8%) when compared to fiscal 2016. With these traffic levels we generated revenues of $40.5 million and a net loss of $0.7 million. Cash flows from operating activities generated an income of $1.7 million. Financial reserves were reduced by $2.2 million in February 2017 in line with budget. Cash and cash equivalents increased from $1.4 million as December 31, 2016 to $5.0 million at June 30, 2017. As of June 30, 2017, our debt position sits at $2.4 million.

VARIANCE ANALYSIS

Pacific Pilotage Authority
For the year to date ended **June 30, 2017**
(thousands of Canadian dollars)

REVENUES	**Actual**	**Budget**	**Variance Fav (Unfav)**	**Variance %**	**Prior Year**
Coastal Pilotage	29,450	26,597	2,853	11%	26,150
River Pilotage	1,783	1,448	335	23%	1,478
Travel - Coastal	3,417	3,336	82	2%	3,257
Travel - River	93	82	10	12%	79
Launch Revenue	3,972	3,851	122	3%	3,846
Launch Replacement	261	243	18	7%	
Launch Fuel	789	614	176	29%	685
Bridging Fee	672	610			
Short Term Interest and Other Income	157	10	147	1538%	64
Gain (Loss) on Investments	(83)	0	(83)		(32)
Other Comprehensive Income	0	122	(122)	-100%	0
TOTAL INCOME	40,510	36,911	3,599	10%	35,528
EXPENSES					
Coastal Contract	27,488	23,807	3,681	15%	23,873
Coastal Callback	343	361	(18)	-5%	342
Coastal Apprentice & Training	648	268	380	142%	789
Coastal Senior Pilot Training - Contract	385	386	(1)	0%	367
PPU Hardware & Software Costs	41	34	7	21%	(47)
Helicopter Program & Operating Projects	211	294	(83)	-28%	566
River Wages & Benefits	1,420	1,292	129	10%	1,278
Coastal Transportation & Travel	2,660	2,598	62	2%	2,738
River Transportation & Travel	99	87	12	13%	83

Launch Wages & Benefits	2,493	2,570	(76)	-3%	2,610
Launch Operating Costs	1,008	897	111	12%	1,074
Launch Fuel Costs	651	527	125	24%	530
Launch Repairs & Maintenance	126	305	(178)	-59%	150
Amortization	732	753	(21)	-3%	592
Salaries & Benefits	1,954	2,000	(46)	-2%	1,996
Transport Canada Service Fee	0	0	0		0
All Other Costs	945	757	188	25%	738
TOTAL EXPENSES	41,205	36,935	4,270	12%	37,680
NET INCOME (LOSS)	(695)	(23)	(671)	2863%	(2,152)

On May 5, 2017, the Authority implemented a 2.90% tariff increase with the written support of industry. This tariff was intended to be implemented on April 1, 2017 but was delayed by slightly over a month, costing the Authority approximately $140,000. The tariff increase was designed to be slightly above contractual increases to service providers in order to begin a slow process of realigning the Authority's margins so that the Board approved year over year losses are slowed and then stopped. This was done in order to return any available reserves to industry without sacrificing safety.

The 2017 financial results for the half year ended June 30, 2017 were below budget by $671,000. This variance was the result of a number of factors, as explained below:

1. Coastal pilotage expenses in the first half of 2017 were above budget by $3.6 million (15%). This was mainly due to the increased coastal traffic when compared to budget, 6,057 actual assignments versus 5,585 budgeted assignments (an 8% increase). This increase was also driven by a significant increase in the use of Island anchorages due to the higher volumes discussed above, as well as a new short stay program implemented by the Vancouver Fraser Port Authority. This program was designed to restrict the amount of time in which vessels are allowed to stay at Vancouver Harbour and English Bay anchorages. The result was more vessels moving between the Island and Vancouver resulting in losses for the Authority (the Authority incurs losses on every one of these assignments and this program was implemented after the 2017 budget was formalized).

2. Coastal apprentice costs were $380,000 (142%) above budget and were driven by an increase in the number of apprentices brought on board in fiscal 2017. An additional 4 unbudgeted apprentices were brought on in order to help decrease future callback costs and to reduce the risks to industry of future retirements by B.C. Coast Pilots.

3. River wages and benefits were $129,000 (10%) above budget and were driven by higher volumes. For the first 6 months of fiscal 2017, 586 actual assignments were performed versus 519 budgeted (an increase of 13%).

4. Launch operating costs were $111,000 (12%) above budget and were driven by unforeseen and unbudgeted work required on the Pacific Scout based out of Victoria.

5. All other costs were $188,000 (25%) above budget and were driven primarily by costs associated with the Waiver Risk Assessment which is being performed. It was decided by the Authority that this was a necessary risk analysis as a result of the *Nathan E. Stewart* incident in fiscal 2016.

6. Salary and administrative costs were below budget by $46,000 (2%) and reflect the Authority's effort to maintain costs at the lowest levels possible.

3.3 Analysis of External Commercial Environment

The Authority's basic measure of output is the number of pilotage trips, which are directly related to the level of shipping activity in British Columbia ports. Shipping activity for future years is forecast following discussions with the marine industry, commodity associations, the cruise ship industry, port authorities, shipping terminals and by analysis of prior years' volumes and traffic patterns. The cruise ship activity is the biggest contributor to a seasonal upswing during the May to September months.

Certain trips require the services of a second pilot mainly due to the fact that these trips are in excess of eight hours. Safety considerations remain paramount as a pilot is allowed to work a maximum of eight hours on continuous bridge watch before a rest break. Most cruise ship assignments where the vessel's home port is Vancouver fall into this category, along with certain northern trips into ports such as Kitimat and Stewart.

Marine Traffic Patterns and Forecast

The Authority categorizes its trips into four key areas: Port of Vancouver, Vancouver Island, Northern B.C. and the Fraser River. In general, the Authority's traffic patterns are remaining comparable to prior years and heavily dependent on commodity volumes and cruise ship trends. The following table shows the annual trips by year and serves to highlight the traffic patterns experienced by the Authority over the last few years.

	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Forecast 2017	Plan 2017
Port of Vancouver	8,725	9,005	9,343	8,639	8,345	8,901	8,730
Vancouver Island	1,626	1,711	1,806	1,647	1,735	1,851	1,815
Northern	1,221	1,445	1,437	1,263	1,307	1,394	1,367
Fraser River	1,081	1,122	1,120	1,079	1,023	1,107	1,152

Other	293	319	275	264	251	267	263
	12,946	13,602	13,981	12,892	12,661	13,521	13,327

Note: The assignments above include second pilot assignments

The 2018 budget anticipates a marginal decrease in overall traffic levels over fiscal 2017. The 2018 budgeted assignment volumes were created based on communication with approximately 100 agencies, terminal operators and ship owners.

The following analysis of trips by commodity sector highlights the diversity of the Authority's customer base and current economic trends with regard to Canadian export and import cargoes. For 2018 we anticipate some changes in these commodity sectors with regards to the actual distribution experienced in 2016 and 2017.

Sector Volume Assumptions	Actual 2016	Forecast 2017	Plan 2018	Plan 2019	Plan 2020	Plan 2021	Plan 2022
Containers	2,224	2,316	2,362	2,362	2,362	2,362	2,362
Grain	1,747	1,900	1,881	1,881	1,881	1,881	1,881
Anchorage	1,564	1,915	1,628	1,628	1,628	1,628	1,628
Forest Products	1,070	1,118	1,095	1,095	1,095	1,095	1,095
Boarding	985	1,107	1,052	1,052	1,052	1,052	1,052
Cruise	992	1,020	1,040	1,040	1,040	1,040	1,040
Coal	792	885	935	935	935	935	935
Auto	731	686	713	713	713	713	713
Tankers	641	476	495	495	495	495	495
Break Bulk	423	527	549	549	549	549	549
Sulphur	422	454	463	463	463	463	463
Petroleum	333	350	357	357	357	357	357
Potash	140	124	130	130	130	130	130
Out of District	149	204	188	188	188	188	188
Other	448	440	403	403	403	403	403
	12,661	13,521	13,291	13,291	13,291	13,291	13,291

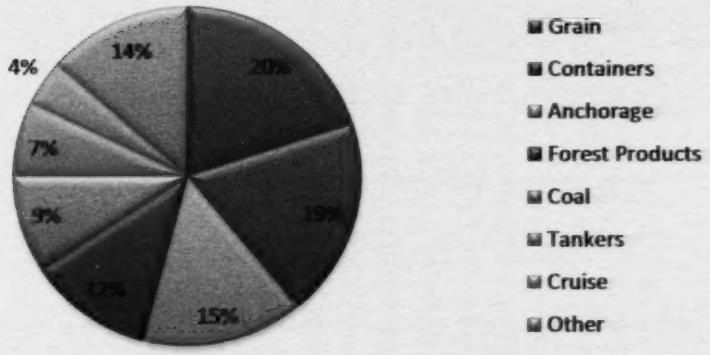
"Other" includes the following – aggregate, aluminium, dry dock, metals, pilot change, salt, steel, sugar

Vancouver Fraser Port

The Vancouver Fraser Port officially includes Vancouver harbour, Fraser River, Roberts Bank and Deltaport. During 2016 and 2017, vessels calling terminals in the Port of Vancouver accounted for approximately 75% of the annual trips performed by the Authority.

In terms of its assignment distribution, the assignments to/from this area in fiscal 2016 were broken down as follows:

Assignment Breakdown



It is anticipated that in fiscal 2017, the port will see an increase in volumes, primarily driven by an anticipated larger grain crop.

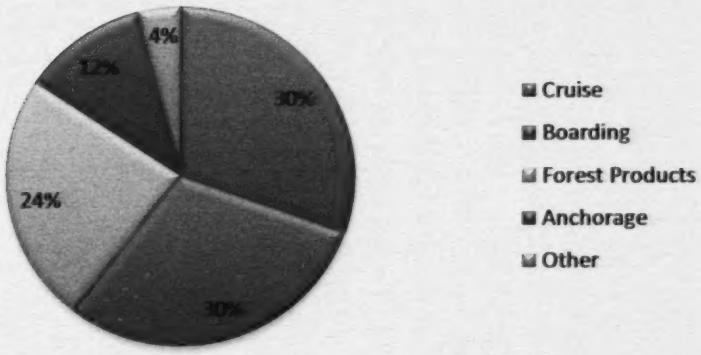
The Vancouver Fraser Port Authority implemented a short stay system for English Bay and Vancouver Harbour anchorages in fiscal 2017. As a result of this policy, more vessels have been brought to Vancouver Island anchorages before being brought into Vancouver terminals. As a result of this policy, the Authority has been affected by having to pay out higher fees for moving vessels between the Island and Vancouver. This change is expected to remain in place in fiscal 2018 and the remaining planning years.

Vancouver Island

This area experienced a slight increase in assignment volumes in fiscal 2016 after experiencing two years of decreases in annual assignment volumes.

For 2016, Vancouver Island represented 14% of the annual trips performed by the Authority. This will remain approximately the same in fiscal 2017. In terms of its assignment distribution, the assignments to/from this area in fiscal 2016 were broken down as follows:

Assignment Breakdown



With some cruise ships using Seattle as a home port, Victoria continues to benefit due to the *Passenger Services Act*, an American law passed in 1886, which states that all foreign registered passenger vessels moving between two U.S. ports must stop at a foreign port. Victoria is geographically positioned to be one of the foreign ports visited between Seattle and Alaska.

In 2018, it is anticipated that Vancouver Island will experience similar assignment volumes to fiscal 2016. The potential effects to trade in a revised softwood lumber agreement are not known at this point (Canadian producers will likely shift any decreases in U.S. supply as a result of increased countervailing duties to increased supply across the Pacific Ocean to the East).

Fraser River

Cargo volumes for the Fraser River are reported as part of the Vancouver Fraser Port section. There are two automobile terminals and one bulk loading dock facility located in the Fraser River area.

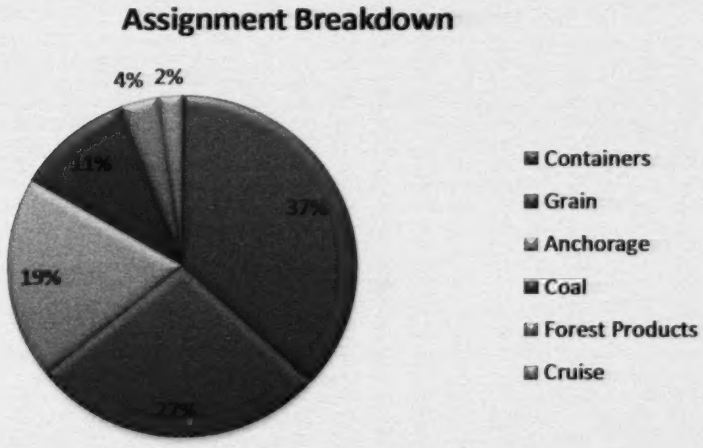
River traffic peaked during 2003 with 1,559 pilotage trips. In fiscal 2016, 1,023 assignments were performed, representing a 5% decrease from the prior year.

For 2017, the Authority has budgeted for 1,107 trips, representing an increase of 8%. This increase is driven by expected increases in auto volumes. In addition, fiscal 2018 volumes are expected to increase by an additional 4% over fiscal 2017.

Northern – Prince Rupert

The Port of Prince Rupert is strategically located on the direct great circle route to/from Asia being more than a day's sailing time closer to Asia than Vancouver and Seattle and almost three days closer than Los Angeles/Long Beach.

For 2016, Prince Rupert represented 8% of the annual trips performed by the Authority. This will remain approximately the same in fiscal 2017. In terms of its assignment distribution, the assignments to/from this area in fiscal 2016 were broken down as follows:



Developments relating to LPG facilities (Pembina Pipelines or Altagas) may have an impact on future volumes and the Authority is actively working with project proponents to determine likely production dates and the effects on manpower supply and distribution as well as boarding stations.

In fiscal 2017, Fairview Terminal (the Prince Rupert container terminal), owned and operated by DP World, completed its Fairview Phase II North expansion, effectively increasing its annual capacity from 775,000 TEUs (built for 500,000 TEUs but handled 776,412 in fiscal 2015) to 1.3 million TEUs. This will have a positive effect on container volumes through Prince Rupert in the planning years.

Northern - Kitimat

Due to its remote location and nautical distance from the established boarding stations, virtually all of the trips through this port involve two pilots. During the winter months, the inclement weather experienced in Kitimat can make servicing this port very difficult with frequent airport and road closures.

The major employer in Kitimat is the aluminum smelter owned by Rio Tinto. Although current trip volumes through this port are not a significant portion of the Authority's traffic base, the potential of this port and enormous scope of projects being planned (i.e. Shell's proposed multi-billion dollar LNG facility) continue to draw attention. There are numerous proposals to build liquid natural gas terminals near this port.

The Authority continues to monitor all these projects and will ensure sufficient pilotage resources are in place if and when they become operational. Our monitoring includes ongoing discussions with industry, government and other stakeholders. We are also involved with much of the analysis and evaluation to determine if these projects are, in fact, viable for transportation from the BC Coast.

Traffic levels for 2017 and 2018 are forecast to be similar to fiscal 2016.

3.4 Financial – Tariff Adjustment for 2017 and 2018

In order to finance its activities, the Authority charges users for its services through a tariff. Consistent with pilotage objectives, the tariff is intended to be fair, reasonable and sufficient to allow for a safe and efficient service. The Authority continues to place great emphasis on the full and comprehensive engagement process by consulting at length with the marine industry prior to a tariff application being initiated.

On an annual basis, the pilotage tariff is set at a rate predicted to cover our fully burdened costs and capital outlays. This tariff is based upon industry's best estimates of volumes and ship sizes at various ports (the measures used to calculate pilotage fees). Once set, the tariff cannot be adjusted. In the past, volume and ship sizes exceeded industry's estimates and created a large reserve fund at the PPA. At that same time, the industry also began to experience a significant downturn. In an effort to help reduce the industry's cost structure, the PPA agreed to charge a smaller tariff than what would mathematically cover our operating and capital expenses, funding this deficit with our reserve fund. This is now depleted, in accordance with our plan and budget.

For fiscal 2017, the Authority's goal is to bring margins back into line. Capital expenditures in fiscal 2017 will be maintained at a minimum level whilst not affecting our high quality of service levels.

In fiscal 2018, the Authority will implement a tariff based on extensive consultation with industry. In fiscal 2016, the Authority created a financial model to allow industry to have input into the tariffs for fiscal 2017 onwards. As a result of multiple meetings (including meetings with all industry associations and separate meetings with the agencies that the associations represent), the Authority emerged with a tariff for fiscal 2018 comprised as follows:

- A 3.75% increase in the pilotage unit fee, the hourly fee, travel and other for fiscal 2018. It should be noted that this increase was largely anticipated by the Authority, and accordingly presented to industry in fiscal 2016.

- An increase in the technology fee from $20 to $50 per assignment to account for the ongoing costs of various unplanned reviews (such as waivers, simulator upgrades etc.) and the actual costs of the PPU program.
- A 9 month extension of the $100 per assignment bridging fee (worth approximately $935k) to account for the one month delay in fiscal 2017, the one month delay in the fiscal 2018 tariff and the increase in unbudgeted port to port costs (as a result of the Vancouver Fraser Port Authority's move to limit stays in Vancouver harbour and English Bay).

Given the fact that the new financial and tariff model developed by the Authority has a high degree of accuracy, any deviations from expectations are easily identified and can be accounted for. This tariff is expected to go into effect on April 1, 2018. The fiscal 2018 tariff was originally expected to go into effect on January 1, 2018 but changes in process in Ottawa have necessitated this alteration. As a result there is a requirement to slightly adjust the tariff upwards above original expectations in order to account for the three lost months of added revenue. In fiscal 2019, the Authority intends to implement a 3.05% increase to all fees effective January 1st.

Based on feedback from industry, it appears that the tariffs presented and proposed by the Authority for fiscal 2018 and fiscal 2019 are acceptable.

The Authority sat with industry and jointly evaluated various options for the tariff for fiscal 2018 and fiscal 2019, using the financial model. One of the scenarios evaluated was the effect on the fiscal 2019 tariff, if there was no tariff in fiscal 2018 (i.e. a situation where the Authority was subject to an objection for the fiscal 2018 tariff and the delay led to an implemented tariff only on January 1, 2019). The model showed that the required minimum tariff for fiscal 2019 would be 9.5%, in order to achieve a position as a going concern by the end of the planning years.

3.5 Inflation

The Authority has budgeted for a 2% annual inflation rate in the years 2018 through 2022.

3.6 Interest Rates

Based on discussions with our bankers, the Authority expects interest rates to remain substantially unchanged through the remainder of fiscal 2017 (0.75%) and through fiscal 2018 (1.0%). It should be noted that the Authority faces market rates which are dependent on a number of other factors.

3.7 Regular Consultations with Stakeholders

The Authority's management team places a high degree of emphasis on customer contact and feedback each year. Customer surveys and service levels expected of the Authority are measured on a regular basis.

The Authority's management team meets with the Chamber of Shipping and Shipping Federation representatives on a regular basis.

The Authority also hosts a monthly Pilotage and Industry Association meeting with representation from all four of our industry stakeholder groups. The intention of these meetings is to enable the Authority and industry to collectively resolve issues as they arise.

The Authority continues to be an active member of the Asia Pacific Gateway Table.

Regular consultations with stakeholders have continued into 2017 and are expected to remain an important part of the Authority's business through the 2018-2022 Corporate Plan years.

4. Objectives, Strategies and Performance Measures

4.1 Strategic Objectives

Strategy – 2017

On an annual basis, the Authority engages in strategic planning sessions involving the Board of Directors and management. The most recent sessions held during the summer of 2017, endorsed the key objectives and strategies for 2015 through 2019 which are summarized below.

Strategic Goals for 2015 – 2019

<table>
<tr><th>Mandate, Vision & Mission</th><th>Primary Areas of Focus</th><th>Strategic Priorities 2015 – 2019</th></tr>
<tr><td rowspan="6">Mandate: The mandate of the Authority is to establish, operate, maintain, and administer in the interest of safety, an efficient pilotage service within the regions set out in respect of the Authority, on a basis of financial self-sufficiency.

Vision Statement: The Authority's vision statement is 'To be a world leader in marine pilotage'.

Mission Statement: The Pacific Pilotage Authority is dedicated to providing safe, efficient pilotage by working in partnership with pilots and the shipping industry to protect and advance the interests of Canada.</td><td rowspan="3">Working "On the Business"

Building for the future – taking steps today to position PPA for the challenges and opportunities of tomorrow</td><td>1. Develop a national framework that provides a platform to address issues that are common to pilotage in Canada</td></tr>
<tr><td>2. Establish and maintain clear and effective relationships with PPA's key stakeholders</td></tr>
<tr><td>3. Continue to develop the capacity within PPA to identify and take action on emerging issues and opportunities</td></tr>
<tr><td rowspan="3">Working "In the Business"

To enhance safety, efficiency and effectiveness</td><td>4. Embrace a culture of continuous improvement</td></tr>
<tr><td>5. Demonstrate through our actions and investment our commitment to ongoing training as a vehicle to enhance and promote safety</td></tr>
<tr><td>6. Ensure the continuity of PPA's people and knowledge capital</td></tr>
</table>

4.2 Measurement of Strategic Objectives for 2016

The Authority measures its strategic goals on an annual basis wherever possible. Certain strategic goals, due to their long-term nature, will be measured over a number of years (retroactive and forward looking).

Strategic Goal #1.A:
Advocate for modifications and improvements to the *Pilotage Act* and the regulatory and tariffing processes.
Strategy: Develop thoughtful submissions to the *Canadian Transportation Act* review committee and Transport Canada regarding modifications and improvements to the *Pilotage Act* and the regulatory process.
Measurement and Accomplishments 2015-17
• During 2016 a tariff application for a temporary surcharge was successfully implemented within a 3.5 month period well below the current 8 month average.
• PPA developed a forecasting model that was used to consult with industry organizations. The end result was written letters of support from two industry organizations for the 2017 tariff application.
• PPA management met with Transport Canada representatives who subsequently consulted with the Department of Justice with regard to non-pilotage sources of revenue. During 2017, PPA was given approval to charge for use of its simulator by third parties.
• During 2017, monthly operations meetings have been initiated with industry associations (quarterly with all customers) that will lead to increased discussion and understanding of the Authority's operations, financial situation and tariff process.

Strategic Goal #1.B:
Develop national world-class marine pilot safety and training programs.
Strategy: Promote, develop and implement standardized national training programs and safety management systems.
Measurement and Accomplishments 2015-17
• Discussions continue with the other Pilotage Authorities to establish a standardized national curriculum.
• Pilot competency and training records have been centralized into a database solution as per PPA's Quality Assurance Program for Pilots.
• Developed and provided in-house PPU/ECDIS training to apprentice pilots. The cost for the in-house course is 50% lower than outsourcing.
• Discussions held with all new project proponents on cost sharing arrangements to support a PPA developed training environment. • Continue to discuss cost sharing with proponents on the upgrade of the Vancouver database for the Kongsberg simulator.
• Safety management system deferred to 2017.
• Agreement reached in 2017 to develop a national BRM-P training program.

Strategic Goal #2.A:
Enhance the relationship with PPA stakeholders.
Strategy: Adopt and implement a formal approach to stakeholder management and implement a stakeholder management program within the PPA.
Measurement and Accomplishments 2015-17
• Define and document key business stakeholders completed 2015.
• Stakeholders engaged with Industry, Terminals, Government and Other.
• Stakeholder management plan was implemented in 2016.

Strategic Goal #2.B:
Clarify respective roles and responsibilities of PPA and BCCP.
Strategy: Work with BCCP leadership team members to establish a joint PPA-BCCP working group to define, document and implement a mutually agreed upon relationship management framework and operating model.
Measurement and Accomplishments 2015-17
• Planning framework clarifying roles and responsibilities completed 2015.
• The parties developed a manning model that is used to determine the number of new apprentices hired.

Strategic Goal #2.C:
Promote public awareness of PPA's plans, programs and initiatives related to its mandate.
Strategy: Develop and implement a public awareness and outreach program with the primary focus on regional issues and engagement on national matters as required.
Measurement and Accomplishments 2015-17
• Key public and community partners identified in 2015.
• Communication strategy developed in conjunction with stakeholder management plan.
• Forty-six official meetings held with various public and community partners during 2016.
• Eleven official meetings held with various public and community partners during Q1 and Q2 2017.

Strategic Goal #3.A:
Enhance PPA's ability to anticipate and respond to changes affecting its operating environment.
Strategy: Engage stakeholders and networks on a regular basis to help identify changes that could impact PPA and/or the marine pilots in Canada and key stakeholders.
Measurement and Accomplishments 2015-17
• During the first six months of 2017 PPA management engaged in: o Four meetings with First Nations groups. o Twelve meetings with industry associations. o Four meetings with federal and provincial government departments. o One meeting with a community organization.
• The PPA executive development program continues into 2017 with regular interaction and

feedback between Board and management.
• The PPA has been invited to work in close co-operation with Transport Canada and provide input on the Oceans Protection Plan (OPP).

Strategic Goal #4.A:
Advocate for modifications and improvements to the Pacific Pilotage Regulations and *Pilotage Act*.
Strategy: Develop thoughtful submissions to Transport Canada and Treasury Board regarding modifications and improvements to the Pacific Pilotage Regulations and the *Pilotage Act*.
Measurement and Accomplishments 2015-17
• Triage, RIAS and cost benefit analysis for PPA regulations were completed 2015.
• During 2017, the PPA consulted with stakeholders and is preparing a discussion document on the *Pilotage Act* review that will seek consensus from West Coast stakeholders.

Strategic Goal #4.B:
Continue to improve and enhance PPA's service delivery capabilities in ways that benefit PPA and its key stakeholders.
Strategy: Identify and implement improvements to PPA's day-to-day service delivery model and operating capabilities.
Measurement and Accomplishments 2015-17
• Dispatch office employee engagement continued in the year, specifically regarding succession planning.
• Cost comparisons of service levels and related costs for vessels completed and expanded to include cost per ton and nautical mile.
• Implementation of the ISO system for the Fraser River Pilots completed 2015.
• A number of efficiencies were incorporated into the service agreement between the BCCP and the PPA during the 2016 negotiation process.
• Information technology enhancements to the online tidal windows program and NetPilot vessel notes were added in 2016.
• The Joint Task Force on Pilotage report has been summarized into an action plan containing recommendations (step a - completed).
• Helicopter boarding on the North Coast using winching was implemented in 2015 and continued into 2017. The helicopter boarding program has been suspended in the second quarter 2017 until a funding model has been agreed to by industry.
• The long-term launch replacement and utilization plan is deferred to late 2017 or beyond depending on helicopter boarding scenarios.
• In 2017 a PRMM was conducted on changes to the PPA waiver system.

Strategic Goal #5.A:
Plan and manage the development of training policies and delivery of the pilot training program.
Strategy: Continue to develop and deploy relevant training policies and pilot training programs.
Measurement and Accomplishments 2015-17
• Panamax vessel simulations were conducted in 2016 using the in-house training facility.
• Development continued on standardized in-house training programs for third and fourth year coastal pilots.
• The criteria defining area currency for pilots is under development in 2017.

Strategic Goal #6.A:
Develop and implement a framework for actively managing succession planning and knowledge transfer within PPA.
Strategy: Implement a proven succession planning framework and develop and implement a knowledge transfer program.
Measurement and Accomplishments 2015-17
• The short and long-term outlook and analysis for each department including management and staff was completed in 2016.
• Recommendations from the Prince Rupert Port Authority manning expectation report were deferred to fourth quarter 2017.
• The development of an in-depth job description and knowledge transfer manual for all management positions are ongoing in 2017.
• Initial discussions on the scope of a new computer system have been initiated in 2017.

4.3 Key Performance Indicators

The performance of the management of the Authority is regularly reviewed and assessed by the Board of Directors. Part of the assessment is based upon certain key performance indicators (KPIs) which are included below.

Results for the year of 2016

	ISSUE	GOAL	ACTUAL 2016
1	Number of delays caused by pilots	0	0
2	Number of dispatch errors causing delays	0	0
3	Incidents on vessels under pilotage		
	a) Class A Incidents	0	0
	b) Class B Incidents	0	0
	c) Class C Incidents	0	5
4	Incidents on pilot launches		
	a) Class A Incidents	0	0
	b) Class B and C Incidents	0	0
	c) Lost time incidents	0	0
5	Unscheduled launch downtime		
	a) Causing operational delays (Total downtime days causing delays/total days)	0%	0%
	b) Not causing operational delays (Total downtime days not causing delays/total days)	0%	1.56%
6	Helicopter usage for pilot transfers (North)	40%	36%
7	Environment: pollution reports from pilot launches	0	0
8	Combined computer runtime (Vancouver and Victoria)	100%	100%
9	Maintain an overhead cost of less than 8.5%	8.5%	7.4%
10	Maintain an adequate contingency fund (2016 – 5% total annual revenue)	5%	3.6%
11	Accounts receivable (Percentage of invoices under 30 calendar days)	90%	87%
12	Maintain average of 8 working days to resolve all complaints	8 days	4.3 days
13	Maintain average of 8 working days to resolve all invoice disputes	8 days	4.5 days

KPI – 1 and 2 - These KPIs are an indicator of the service level provided to the marine industry. Pilotage services are provided on demand, whenever a customer requests them.

KPI – 3 and 4 - These KPIs relate to the safety record of the Authority. All vessel and launch incidents are tracked and investigated, if warranted. The intent is to improve our safety record wherever possible.

KPI – 5 - This KPI measures the Authority's launch operations by tracking unscheduled launch downtime that causes a delay to a vessel. In order to avoid delays the Authority maintains backup launches which can be transferred between stations if the need arises. The Authority also has the opportunity to charter a launch if its backup launches are already allocated.

KPI – 6 - This KPI measures the success of the helicopter program. The breakeven point for the helicopter program is above 65%, but the Authority knew that this number was only achievable once the program reaches 24 hour service which was expected to occur in fiscal 2018.

KPI – 7 - This KPI measures the Authority's sustainability program.

KPI – 8 - This KPI measures the computer runtime for our dispatch database which is the primary computer system for the Authority. Our dispatch centres are located in Vancouver and Victoria and are designed to back each other up in the event of downtime. These centres operate around the clock every day of the year so it is essential the computer database is operational.

KPI – 9, 10 and 11 - These three KPIs are financial in nature and reflect general good business practices. The contingency fund level is set by the Authority's Board and is intended to finance operations for a period of sustained severe issue(s) or force majeure situation. KPI #10 is not met for fiscal 2016, because the Authority agreed in consultation with industry to deplete the contingency fund in order to soften the tariffs for fiscal 2017 and 2018. This was approved by the Authority's Board and this KPI will be reflected as an absolute dollar figure in fiscal 2017.

KPI – 12 and 13 - These KPIs reflect the Authority's commitment to provide a high degree of service to all pilotage stakeholders. In an average year, approximately 12,000 invoices are issued to industry and it is the Authority's goal to ensure a high level of accuracy and completeness in this process. It is the same with complaints, no matter what they relate to, the Authority takes comments very seriously and responds in a professional timeline and manner.

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Key Performance Indicator goals for fiscal 2018 through 2022

	ISSUE	GOAL
1	Number of delays caused by pilots	0
2	Number of dispatch errors causing delays	0
3	Incidents on vessels under pilotage	
	a) Class A Incidents	0
	b) Class B Incidents	0
	c) Class C Incidents	0
4	Incidents on pilot launches	
	a) Class A Incidents	0
	b) Class B and C Incidents	0
	c) Lost time incidents	0
5	Unscheduled launch downtime	
	a) Causing operational delays (Total downtime days causing delays/total days)	0%
	b) Not causing operational delays (Total downtime days not causing delays/total days)	0%
6	Helicopter usage for pilot transfers (North)	0%
7	Environment: pollution reports from pilot launches	0
8	Combined computer runtime (Vancouver and Victoria)	100%
9	Maintain an overhead cost of less than 8.5%	8.5%
10	Contingency fund	$1,075,000 in 2018 $1,689,000 in 2019 $2,304,000 in 2012 $2,937,000 in 2021 $3,579,000 in 2022
11	Accounts receivable (Percentage of invoices under 30 calendar days)	90%
12	Maintain average of 8 working days to resolve all complaints	8 days
13	Maintain average of 8 working days to resolve all invoice disputes	8 days

4.4 Operating Budget 2018 - 2022 Commentary

The 2018-2022 budgets are based upon the following key expectations based on extensive consultation with industry:

Product Sector Assumptions

Sector	Assignment Growth Rate	LOA Growth Rate	Breadth Growth Rate	Draft Growth Rate	Year under Display
Containers	3%	-1%	0%	-1%	Fiscal 2017
Grain	11%	1%	0%	1%	
Anchorage	33%	4%	30%	2%	
Forest Products	5%	0%	0%	4%	
Cruise	3%	1%	4%	3%	
Coal	11%	2%	3%	1%	
Auto	-7%	0%	2%	0%	
Tankers	-25%	3%	2%	7%	
Boarding	14%	1%	2%	1%	
Breakbulk	23%	3%	3%	2%	
Sulphur	7%	8%	4%	2%	
Petroleum	6%	-1%	0%	-1%	
Potash	2%	6%	2%	7%	
Out of District	37%	-26%	-21%	-12%	
Other	2%	-28%	-29%	-20%	
Fraser River	12%				

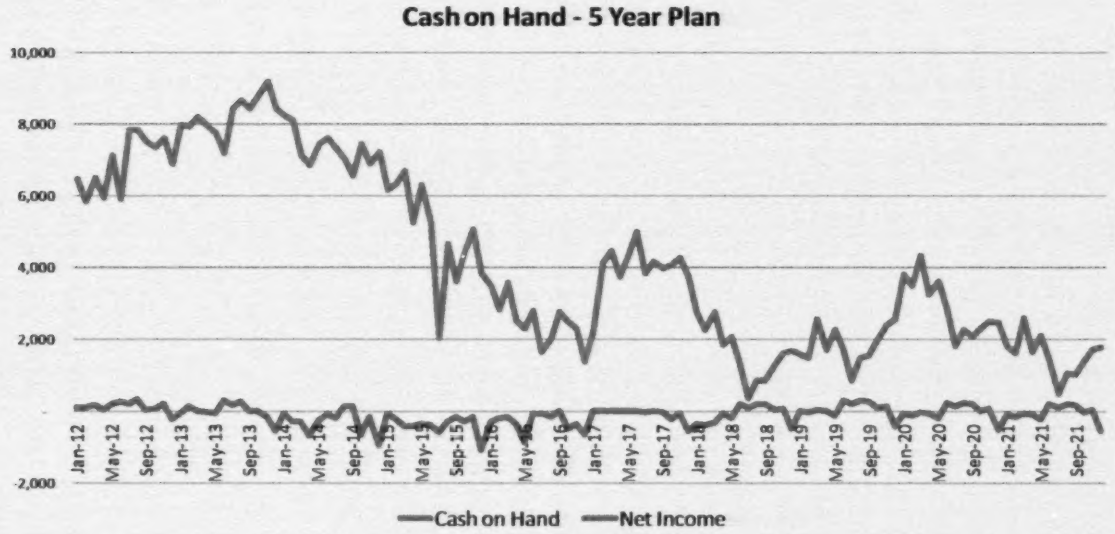
Product Sector Assumptions

Sector	Assignment Growth Rate	LOA Growth Rate	Breadth Growth Rate	Draft Growth Rate	Year under Display
Containers	2%	1%	1%	0%	Fiscal 2018
Grain	-1%	1%	1%	1%	
Anchorage	-15%	0%	-15%	-2%	
Forest Products	-2%	0%	1%	0%	
Cruise	2%	1%	1%	1%	
Coal	6%	0%	0%	0%	
Auto	4%	0%	0%	0%	
Tankers	4%	1%	1%	1%	
Boarding	-5%	0%	0%	0%	
Breakbulk	4%	0%	0%	0%	
Sulphur	2%	0%	1%	1%	
Petroleum	2%	0%	0%	0%	
Potash	5%	1%	1%	1%	
Out of District	-8%	0%	0%	0%	
Other	2%	2%	2%	0%	
Fraser River	4%				

The fiscal 2019 through fiscal 2022 years have assumed no changes to assignment growth rates, LOAs, breadth or drafts of vessels.

The assumptions listed above drive product assignment volumes, geographic distribution, and dimensional metrics for the Authority which are tied to the tariff.

Based on these assumptions together with the proposed tariff, the Authority expects to achieve the following cash position over the planning years:



As can be seen above, the Authority intends to bring its cash to the lowest level possible whilst still maintaining is self-sufficiency mandate. The Authority is able to achieve this cash position with the following proposed tariffs and investment assumptions:

	Tariff				Launch Fees					
	Unit	Hourly	Travel	Launch Rate	Brotchie	Triple	Rupert 8 & 9	Rupert 10 - 11	Sand Heads	Pine
Fiscal 2030	1.20%	1.20%	2.00%	2.00%	$ 557	$ 2,894	$ 779	$ 1,321	$ 2,231	$ 5,369
Fiscal 2029	1.20%	1.20%	2.00%	2.00%	$ 546	$ 2,838	$ 764	$ 1,295	$ 2,187	$ 5,263
Fiscal 2028	1.20%	1.20%	2.00%	2.00%	$ 536	$ 2,782	$ 749	$ 1,270	$ 2,144	$ 5,160
Fiscal 2027	1.20%	1.20%	2.00%	2.00%	$ 525	$ 2,727	$ 735	$ 1,245	$ 2,102	$ 5,059
Fiscal 2026	1.20%	1.20%	2.00%	2.00%	$ 515	$ 2,674	$ 720	$ 1,220	$ 2,061	$ 4,960
Fiscal 2025	0.75%	0.75%	2.00%	2.00%	$ 505	$ 2,622	$ 706	$ 1,197	$ 2,021	$ 4,862
Fiscal 2024	0.75%	0.75%	2.00%	2.00%	$ 495	$ 2,570	$ 692	$ 1,173	$ 1,981	$ 4,767
Fiscal 2023	0.75%	0.75%	2.00%	2.00%	$ 485	$ 2,520	$ 679	$ 1,150	$ 1,942	$ 4,674
Fiscal 2022	0.75%	0.75%	2.00%	2.00%	$ 476	$ 2,470	$ 665	$ 1,128	$ 1,904	$ 4,582
Fiscal 2021	2.75%	2.75%	2.00%	2.00%	$ 466	$ 2,422	$ 652	$ 1,105	$ 1,867	$ 4,492
Fiscal 2020	2.75%	2.75%	2.75%	2.75%	$ 457	$ 2,374	$ 639	$ 1,084	$ 1,830	$ 4,404
Fiscal 2019	3.05%	3.05%	3.05%	3.05%	$ 445	$ 2,311	$ 622	$ 1,055	$ 1,781	$ 4,286
Fiscal 2018	3.75%	3.75%	3.75%	3.75%	$ 432	$ 2,242	$ 604	$ 1,024	$ 1,728	$ 4,159
Fiscal 2017	2.90%	2.90%	2.90%	7.00%	$ 416	$ 2,161	$ 582	$ 987	$ 1,666	$ 4,009

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Other												
Launch Replacement	Fuel	Bridging	PPA Union Increases	CPI		Operating Projects	Launch Replacement	Interest Rates	Investment Draw	Investment Balance
$ -	70.01 to 80.0	$ -	2.00%	2.0%		200,000	2,393,426	1.25%	-	4,885,907
$ -	70.01 to 80.0	$ -	2.00%	2.0%		200,000	2,393,426	1.25%	-	4,825,245
$ -	70.01 to 80.0	$ -	2.00%	2.0%		200,000	2,393,426	1.25%	-	4,765,335
$ -	70.01 to 80.0	$ -	2.00%	2.0%		200,000	2,393,426	1.25%	-	4,706,170
$ -	70.01 to 80.0	$ -	2.00%	2.0%		200,000	2,393,426	1.25%	-	4,647,739
$ -	70.01 to 80.0	$ -	2.00%	2.0%		200,000	2,393,426	1.25%	-	4,590,034
$ -	70.01 to 80.0	$ -	2.00%	2.0%		200,000	2,393,426	1.25%	250,000	4,533,045
$ -	70.01 to 80.0	$ -	2.00%	2.0%		200,000	2,393,426	1.25%	600,000	4,228,062
$ -	70.01 to 80.0	$ -	2.00%	2.0%		200,000	2,393,426	1.25%	600,000	3,578,683
$ -	70.01 to 80.0	$ -	2.00%	2.0%		200,000	2,393,426	1.25%	600,000	2,937,366
$ 60	60.01 to 70.0	$ -	2.00%	2.0%		200,000	2,393,426	1.00%	600,000	2,304,011
$ 60	60.01 to 70.0	$ 100	2.00%	2.0%		200,000	1,860,067	1.00%	600,000	1,689,208
$ 60	60.01 to 70.0	$ 100	2.00%	2.0%		200,000	1,326,708	0.75%	600,000	1,074,901
$ 60	60.01 to 70.0	$ 100	3.00%	2.0%		400,000	793,350	0.40%	- 2,285,000	468,743
	50.01 to 60.0									

Borrowing		Technology Fee		
Borrowing		Per Assignment Fee	Balance	Helicopter Fee / Assignment
Launch Fiscal Year	**2019**	$ 50	$ **8,909,300**	$ -
Funding	$ -	$ 50	$ **8,244,772**	$ -
Rate	3%	$ 50	$ **7,580,243**	$ -
Term (yrs)	15	$ 50	$ **6,915,715**	$ -
		$ 50	$ **6,251,186**	$ -
Launch Fiscal Year	**2027**	$ 50	$ **5,586,658**	$ -
Funding	$ -	$ 50	$ **4,922,129**	$ -
Rate	3%	$ 50	$ **4,257,601**	$ -
Term (yrs)	15	$ 50	$ **3,593,072**	$ -
		$ 50	$ **2,928,544**	$ -
New PPU Program Cost	$ **2,000,000**	$ 50	$ **2,264,015**	$ -
Funding	$ 2,000,000	$ 50	$ **1,599,487**	$ -
Rate	3%	$ 50	$ **934,958**	$ -
Term (yrs)	5	$ 20	$ **270,429**	$ -

It should be noted that the Authority's Board of Directors has allowed the Authority to bring the Investment Account to a minimum level in fiscal 2017 in order to provide any/all relief possible to industry. This therefore allows the Authority to slow its subsequent increases in its tariff. Any unforeseen events and issues will have a more material effect on the Authority given its lack of available reserves. This was a strategic decision so as to provide all possible relief in the current economic environment.

The highlights of the 2018 budget are as follows:

1. The Authority forecasts a loss of $1.1 million based upon 12,139 coastal and 1,152 River assignments. This represents a 2% decrease in coastal assignments and a 4% increase in Fraser River assignments when compared to the 2017 forecast. This loss is manageable from a cash flow perspective with the introduction of a 3.75% tariff effective April 1, 2018, together with an increase to the technology fee from $20 to $50 as well as a continuation of

the temporary $100 per assignment fee, expected to be re-introduced for a 9 month period, from April 1, 2018 through December 31, 2018.

2. Total revenues are expected to reach $86.4 million in fiscal 2018, representing a 2% increase over fiscal 2017. This slight increase is driven primarily by:
   - The implementation of a 3.75% tariff effective April 1, 2018,
   - The increase in the technology fee from $20 per assignment to $50 per assignment, and
   - The temporary $100 per assignment fee being extended for an additional 9 months,

   which are all offset by an anticipated 2% decrease in the number of assignments.

3. Coastal pilotage revenues in 2018 are expected to exceed 2017 by $613k (1%), driven primarily by the tariff and offset by traffic decreases. The increased revenue is expected to be offset by an additional $187k in costs driven primarily by contractual pilot increases and callback expenses. The costs of training apprentice and licensed pilots are expected to decrease by $37k below 2017.

4. River pilotage revenues in 2018 are expected to exceed 2017 by $262k (7%), driven by the tariff increase as well as volume increases. The increased revenue is expected to be offset by $54k (2%) in additional wage costs for the River pilots. No new River pilots are forecast to be trained in 2018 because the Authority hired and trained a new pilot in 2014 and this group of pilots can handle the anticipated volume in 2018.

5. Travel revenues in 2018 are expected to exceed 2017 by $191k, driven by traffic and tariff increases. The travel costs for fiscal 2018 are expected to increase by $59k.

6. The budget allows for 8 coastal apprentice pilots starting in the 2018 plan year. Training and wage costs for apprentice pilots are expected to be $1.5 million in fiscal 2018 and the training costs for senior pilots are expected to be $851k.

4.5 Sensitivity of Corporate Plan Projections

The fundamental assumption in the Authority's Corporate Plan is the number of pilotage assignments each year. This number is in part a measure of Canadian exports and imports and is influenced by many external factors outside the control of the Authority. Some of these factors are:

- the export volumes of grain, forest products, coal and other bulk commodities,
- the effect of any receivership and bankruptcy applications by any carriers and/or agencies
- foreign exchange rates,
- West Coast port competition for shipping traffic,
- general economic conditions in Asia and North America.

The Authority's major expense in any given year is the payout to the British Columbia Coast Pilots Ltd. As a result of this structure, the Authority is well positioned to respond to temporary downturns of traffic. The BCCP are entrepreneur pilots and as such contract their services to the Authority under the terms of the *Pilotage Act*, and acknowledge the risk of decreased remuneration during diminished traffic periods.

The existing longshore contract is set to expire in fiscal 2018 and may potentially affect the Authority and its ability to obtain and extract lower rates from its staff and the BCCP in future negotiations.

5. Compensation and Labour Relations Information

5.1 Personnel Resources

In fiscal 2016, the Authority had 76 full time equivalent employees: 8 Fraser River pilots, 16 dispatchers, 37 pilot launch personnel and 15 management and administrative personnel.

The required complement of coastal pilots is established annually in relation to the projected assignments and announced retirements.

The Authority contracts with the British Columbia Coast Pilots Ltd. for coastal pilotage services. During 2017, a workforce of approximately 114 contract pilots (87 full-time, 9 half-time and 19 seasonal) will provide coastal pilotage services to the Authority. We expect this number to remain approximately the same in fiscal 2018.

5.2 Collective Agreements

The Authority has collective agreements with three groups of employees. These collective agreements, all long-term and seven-year's duration were based on the eight-year longshore workers settlement:

- the Canadian Merchant Service Guild, representing all employee pilots, expires January 31, 2020 and has had voluntary severance removed;
- the Canadian Merchant Service Guild, representing all launch masters and engineers, expires March 31, 2018;
- the International Longshore & Warehouse Union, Local 520, representing all deckhands, dispatchers and administrative staff, expires March 31, 2018.

The Authority has a Board endorsed policy in place covering the upcoming negotiations.

5.3 Replacement and Training of Pilots

The Authority holds pilot entry exams semi-annually (to increase the number of potential candidates) to assess candidates who have the necessary experience and skills to perform the job. In addition, pre-exam sessions have been held to inform prospective candidates of the necessary requirements. This approach has continued to increase the pool of candidates for such a specialized career.

The Authority also promotes and oversees a familiarization program, which is intended to supplement a candidate's coast wide knowledge, prior to writing the pilot exam. This program allows a candidate to ride along with a senior pilot in an area of the coast the candidate may not be familiar with for up to two years.

The Authority and BCCP have also participated in marine hiring fairs with the intention of increasing the hiring pool of suitable candidates with regard to the marine pilotage profession.

In order to ensure a highly qualified and skilled pilot workforce, the Authority places major emphasis upon selection and training of pilots. The pilot exam process consists of three parts:

- a three hour written exam on general ship knowledge based on the 500 tonne Master Near Coastal exam
- a three and a half hour exam on local knowledge
- a three and a half hour oral exam session.

Depending on a candidate's background, the apprenticeship for a coastal pilot takes place over a minimum period of 9½ months through to a maximum of 24 months. During the official apprenticeship period the candidate will attend training courses for ship handling in the U.K., ship simulation and Bridge Resource Management training in Quebec, and tethered tug training at BCIT, Vancouver. It is the Authority's desire to do as much training and education in Canada

if the facilities are available and of the highest calibre. The training facilities used are state of the art and offer manned model handling and full mission bridge simulators. Additionally the candidates are trained in the use of the Portable Pilotage Units (PPUs) and related software.

The manned model training facilities are currently located in France, Poland and the United Kingdom and they use manned 1:25 scale models of ships. These facilities are located on manmade lakes that can simulate currents, tides, tug boat assists, etc. The Authority will continue to evaluate new training facilities as they become available.

Using these facilities to train on these scale models allows pilots to acquire deep sea ship-handling experience. Periodic training on scale models also helps to maintain pilot ship handling skills at the highest level.

The ship models behave exactly like real ships, only much faster. Manned models sharpen the ship handlers' natural senses of perception and anticipation and enable the ship's behaviour as a whole to be appreciated. These skills are paramount when manoeuvring a full size vessel.

The time scale also means that it is possible to perform five times as many manoeuvres. In other words, it is possible to perform as many manoeuvres in a 35-hour course as in 175 hours on a real ship.

The Pilot Training and Examination Committee (PTEC) regularly examines and compares training facilities on a worldwide basis to ensure our training standards and the instruction level are relevant, effective and valid.

At present, the cost for each apprentice is approximately $192,750, which includes remuneration, travel and course fees and is borne entirely by the Authority. The Authority remunerates, controls, and defines the required training for apprentices in order to reinforce the quality and safety needed to keep aligned with our mandated safety requirements.

During the year 2017, 8 coastal pilots received their licences and 8 apprentices were admitted into the program (as of June 30, 2017).

The Authority also conducts a Pilot Familiarization Program for interested candidates. This program is limited to forty candidates (current enrolment is thirty-four) who participate in order to supplement and upgrade their coast-wide knowledge.

The Authority expects to train and license pilots over the Corporate Plan years as follows:

Year	Pilots Trained
Fiscal 2017	8
Fiscal 2018	8
Fiscal 2019	8
Fiscal 2020	8

Fiscal 2021	8
Fiscal 2022	6

The Authority has projected the coastal pilots' demographics through the plan years and is anticipating starting apprentices in each of the plan years to compensate for retirement as well as requirement numbers to maintain an efficient operation.

The Authority is budgeting funds during each of the plan years to continue funding the Skills Enhancement Program for senior pilots. The intent of this program is to provide opportunities for senior pilots at approved training facilities to enhance their skills in ship handling using manned models.

The Authority is also forecasting additional funds through the plan years to cover ongoing training for pilots on Bridge Resource Management for Pilots (BRM-P), Azipod propulsion systems and tethered tug.

The Authority also supplements training where possible through its Vancouver in-house training centre.

The Authority has budgeted a yearly training expense for senior pilots and apprentice pilots (training and remuneration expenses) as follows:

5.4 Agreement for Pilot Services – BCCP

The financial increases and adjustments agreed to with the Authority's prime contractor, the BCCP, are summarized below:

- Contract term - 5 years (2017 -2021)
- Rates
    - Pilotage Unit Fee
        - 2016 – reduced from 4% to 1%
        - 2017 to 2021 – 1.75% per annum
    - Hours & Other
        - 2016 – 4% as per original agreement
        - 2017 – 2021 – 2% per annum
- Callbacks - technical cap of 1.58% of BCCP revenue. Agreement that if callbacks exceed this acceptable amount, the LOU #4 (Letter of Understanding) pertaining to callbacks will be opened to review terms.
- Expense reductions:
    - Kongsberg simulator investment and continued financial contribution
    - PTEC – frequency of manned model training for unrestricted pilots to be increased from 5 year to 7 years – resulting in $169,000 per annum savings to the

Authority – this will not result in any reduction in safety partly due to the introduction of an in-house simulator (paid for equally by the Authority and the BCCP).

- This model of time to become unrestricted is considered to be best practice
- Training is front-loaded in a restricted pilot's career

5.5 Key assumptions over the planning period

The Authority has budgeted annual wage increases of 2% from fiscal 2018 onwards, in line with CPI forecasts and largely in line with the Governments' suggested cost containment measures.

5.6 Employee Benefits

All eligible employees of the Authority are covered by the Public Service Pension Plan (the "Plan"), a contributory defined benefit plan established through legislation and sponsored by the Government of Canada. Contributions are required by both the employees and the Authority to cover current service cost. Pursuant to legislation currently in place, the Authority has no legal or constructive obligation to pay further contributions with respect to any past service or funding deficiencies of the Plan.

The normal age of retirement within the Authority is 65 years.

2016 – Employed in plan prior to 2013	Employee contribution	Employer contribution rate times Employee rate
$0 - $54,900	9.05%	1.15
Above $54,900	11.04%	1.15
Earnings over $161,700	11.04%	6.67

2016 – Employed in plan from Jan 1, 2013	Employee contribution	Employer contribution rate times Employee rate
$0 - $54,900	7.86%	1.11
Above $54,900	9.39%	1.11
Earnings over $161,700	9.39%	6.67

2017 – ESTIMATE 2017 - Employed in plan prior to 2013	Employee contribution	Employer contribution rate times Employee rate
$0 - $55,300	9.47%	1.01
Above $55,300	11.68%	1.01
Earnings over $163,100	11.68%	7.74

2017 – ESTIMATE 2017 - Employed in plan from Jan 1, 2013	Employee contribution	Employer contribution rate times Employee rate
$0 - $55,300	8.39%	1
Above $55,300	9.94%	1
Earnings over $163,100	9.94%	7.74

2018 – ESTIMATE 2018 - Employed in plan prior to 2013	Employee contribution	Employer contribution rate times Employee rate
$0 - $55,800	9.80%	1
Above $55,800	12.30%	1
Earnings over $164,500	12.30%	8.8

2018 – ESTIMATE 2018 - Employed in plan from Jan 1, 2013	Employee contribution	Employer contribution rate times Employee rate
$0 - $55,800	8.90%	1
Above $55,800	10.50%	1
Earnings over $164,500	10.50%	8.8

Since 2006, employee contribution rates have gradually increased to reach a more balanced cost-sharing ratio with the Government of Canada.

Effective January 1, 2013, a plan to phase in additional employee contribution rate increases for the public service pension plan will result in an employee-employer cost-sharing ratio of 50:50 in 2017.

Employees are entitled to severance and sick leave benefits as provided for under collective agreements or employment contracts.

6. Government Direction

The *Financial Administration Act* (FAA) (s. 89) empowers the Governor in Council (GIC), on the recommendation of the appropriate Minister, to issue a directive to a parent Crown corporation if the GIC is of the opinion that it is in the public interest to do so.

On July 16, 2015, Crown corporations were directed by the Governor in Council (GIC) to align their policies, guidelines and practices with Treasury Board policies, directives and related instruments on travel, hospitality, conference and event expenditures in a manner that is consistent with their legal obligations.

The Authority has implemented the Order in Council effective August 1, 2015 which is discussed in more detail in section 13.

7. Support for Government Policies

This Corporate Plan continues to include an ongoing commitment to measures already in place and throughout the budget years of 2018 to 2022.

In fiscal 2016, the Authority has implemented the following cost cutting and margin creating measures:

1. The Authority renegotiated the financial terms of the BCCP contract with the Authority for fiscal 2016 onwards bringing down the pilotage unit rate increase from 4% down to 1%. This saved the Authority and the industry we serve approximately $800,000 in costs in fiscal 2016 and has a significant rollover effect (i.e. the cost savings will continue to flow into subsequent years).
2. The Authority delayed capital spending projects to preserve cash flows such as:
    a. planned dock upgrades in Prince Rupert for $200,000
    b. a planned replacement of the Pacific Pathfinder's engine, saving approximately $480,000
    c. a planned upgrade of the Klein N-Tier dispatch and accounting system was delayed by 2 years into fiscal 2019 saving $600,000
3. Inner-harbour airline trips between Vancouver and Victoria are paid for by pre-purchasing flights with two carriers. By using these prepaid tickets, the Authority benefits from a lower per flight cost which resulted in total annual savings of $120,000 during 2016.
4. The Authority cut down launch repair costs wherever possible, reducing costs by $127,000.

The Authority provides its pilotage services on waters bordering many indigenous populations. The Authority is constantly engaged in outreach programs to ensure that local populations are educated on the role of pilotage in supporting safety of shipping on the west coast. In addition, when the Pilotage authority performs a risk assessment, the issues and concerns expressed by local indigenous populations are taken into consideration through an active consultation process (i.e. as was done in the most recent waiver risk assessment).

8. Corporate Plan Financial Statements

8.1 Statement of Operations

Statement of Operations ($000's Canadian dollars)	Pacific Pilotage Authority							
	2016	2017 budget	2017 forecast	2018	2019	2020	2021	2022
Revenue								
Pilotage Tariffs	75,650	73,782	82,921	84,370	87,783	90,104	92,531	93,427
Pilotage Surcharges	517	1,716	1,895	1,467	1,747	533	-	-
Others (interest, supplementary fees & charges)	117	261	215	578	673	673	675	675
Total Revenue	76,284	75,759	85,031	86,415	90,203	91,310	93,206	94,103
Direct Pilotage Costs								
Pilot Costs								
Pilotage Fees (if under contract)	52,156	49,852	57,978	58,165	59,999	61,069	62,335	62,920
Pilot Salaries and Benefits	2,439	2,649	2,711	2,766	2,821	2,877	2,935	2,994
Total Pilot Costs	54,595	52,501	60,690	60,931	62,820	63,946	65,270	65,914
Pilot Boat and Pilot Travel	-	-	-	-	-	-	-	-
Pilot Boat Crew (salaries and benefits)	5,139	5,283	5,302	5,546	5,657	5,770	5,886	6,003
Pilot Boat Operating Cost (fuel, maintenance)	2,237	2,140	2,655	2,784	2,808	2,832	3,054	3,079
Pilot Boat Ownership Costs (Depreciation & Finance)	684	785	727	753	723	692	732	761
Pilot Boat Fees (if under contract)	3,097	2,178	2,056	1,698	1,727	1,758	1,788	1,820
Pilot Travel Expenses	5,873	5,587	6,019	6,078	6,181	6,290	6,416	6,545
Other Related Costs	-	10	7	7	8	8	8	8
Total Pilot Boat and Pilot Travel	17,031	15,983	16,766	16,866	17,103	17,350	17,883	18,216
Other Pilotage Expenses	-	-	-	-	-	-	-	-
Portable Pilotage Units	606	756	761	959	713	1,190	1,536	920
Pilot Training	2,159	2,033	2,429	2,393	2,431	2,434	2,466	2,082
Dispatch Center	1,740	1,862	1,836	1,899	1,937	1,975	2,015	2,055
Other Pilotage Costs	169	185	181	185	188	192	196	200
Total Other Pilotage Expenses	4,674	4,835	5,207	5,435	5,269	5,792	6,214	5,257
Total Direct Pilotage Costs	76,300	73,319	82,663	83,231	85,192	87,088	89,366	89,387
Indirect Pilotage Costs								
Administrative Expenses								
Administration (salaries and benefits)	2,228	2,353	2,333	2,400	2,448	2,497	2,547	2,597
Professional Services	121	92	321	472	481	491	501	511
Regulatory Fees (TC service fee)	-	-	-	-	-	-	-	-
Rent/Utilities/Supplies/Computers	940	913	1,006	1,075	1,085	1,149	1,148	1,146
Other Amortization	52	34	40	34	40	41	43	45
Other Administration Expenses	416	312	321	327	334	341	347	354
Total Administration Expenses	3,756	3,704	4,021	4,307	4,388	4,518	4,586	4,654
Financing Cost	-	-	-	-	-	-	-	-
Total Indirect Pilotage Costs	3,756	3,704	4,021	4,307	4,388	4,518	4,586	4,654
Total Expenses	80,057	77,023	86,683	87,538	89,580	91,607	93,952	94,040
Net Profit (Loss)	- 3,772	- 1,264	- 1,652	- 1,123	623	- 296	- 746	62
Capital Reimbursement	1,239	- 375	- 375	- 385	395	1,217	- 805	- 829
Number of Contract Pilots (FTEs)	106	111	113	112	113	114	113	115
Number of Employee Pilots	8	8	8	9	10	11	12	13
Number of Assignments	12,753	12,878	13,521	13,291	13,291	13,291	13,291	13,291
Average Assignment per Pilot	120	116	120	119	118	117	118	116
Revenue over Assignments ratio	5,982	5,883	6,289	6,502	6,787	6,870	7,013	7,080

8.2 Balance Sheet

FINANCIAL STATEMENTS

PACIFIC PILOTAGE AUTHORITY
Statement of financial position ($000s Canadian dollars)

As at December 31st	Actual 2016	Budget 2017	Forecast 2017	Plan 2018	Plan 2019	Plan 2020	Plan 2021	Plan 2022
Assets								
Current								
Cash and cash equivalents	1,382	2,067	3,739	1,680	2,557	2,444	1,775	1,937
Accounts receivable - trade	5,321	5,349	5,357	5,993	6,194	6,263	6,391	6,450
Accounts receivable - other	55	135	159	156	161	163	166	168
Accounts receivable - GST	1,940	594	1,121	1,385	961	972	992	1,001
Travel advances	18	25	25	25	25	25	25	25
Prepaid expenses	320	84	135	138	141	144	147	149
Prepaid travel & Other	79	120	120	123	125	128	130	133
Mortgage Receivable	131	261	261	269	277	286	295	304
	9,245	8,634	10,919	9,769	10,443	10,423	9,920	10,167
Non-current								
Long-term investments	2,410	469	469	1,075	1,689	2,304	2,937	3,579
Mortgage Receivable	-	2,380	2,380	2,103	1,817	1,523	1,220	907
Other Receivables	201	217	-	-	-	-	-	-
Fixed Assets								
Buildings & floats	404	604	404	604	604	619	669	669
Pilot boats	15,841	14,513	13,167	14,480	14,555	14,835	15,605	15,805
Communication and other	376	417	243	285	326	368	409	451
Computer software & equipment	3,171	3,173	3,219	3,290	3,912	6,018	6,053	6,090
Intangibles	665	665	665	665	665	665	665	665
Leasehold improvements	261	246	261	261	261	261	261	261
	20,718	19,618	17,959	19,584	20,323	22,766	23,662	23,940
Accumulated depreciation	9,016	10,418	10,318	11,798	13,009	14,667	16,712	18,172
Total fixed assets	11,702	9,200	7,641	7,786	7,314	8,099	6,950	5,768
	23,557	20,901	21,408	20,733	21,263	22,349	21,027	20,421

PACIFIC PILOTAGE AUTHORITY
CORPORATE PLAN
2018 TO 2022

As at December 31st	Actual 2016	Budget 2017	Forecast 2017	Plan 2018	Plan 2019	Plan 2020	Plan 2021	Plan 2022
Liabilities								
Current								
Accounts payable and accrued lial	5,916	5,772	5,944	6,241	6,451	6,522	6,656	6,718
Wages and employee deductions	3,925	4,153	4,068	4,605	4,697	4,791	4,887	4,984
Employee termination benefits	630	978	978	978	978	978	978	978
	10,471	10,903	10,991	11,824	12,126	12,291	12,520	12,680
Non-current								
Other employee benefits	893	-	-	-	-	-	-	-
Bank Debt	2,235	2,199	2,199	1,814	1,419	2,636	1,831	1,002
	13,599	13,102	13,190	13,638	13,545	14,927	14,351	13,682
Equity								
Retained earnings	9,958	7,799	8,218	7,095	7,718	7,422	6,676	6,738
	23,557	20,901	21,408	20,733	21,263	22,349	21,027	20,421

8.3 Statement of Cash Flows

FINANCIAL STATEMENTS

PACIFIC PILOTAGE AUTHORITY
Statement of cash flows ($000s Canadian dollars)

For the year ended December 31st	2016	Budget 2017	Forecast 2017	Plan 2018	Plan 2019	Plan 2020	Plan 2021
Cash flows from operating activities							
Cash receipts from customers	76,413	75,124	84,779	85,202	89,328	90,569	92,403
Cash paid to employees, suppliers & other	- 79,060	- 74,941	- 84,094	- 84,913	- 86,980	- 89,128	- 91,030
Other income received	38	514	223	269	277	286	295
Employee severance benefit payments	-	-	-	-	-	-	-
Adjustments	-	-	- 76	-	-	-	-
Net cash provided by operations	- 2,608	697	832	558	2,626	1,727	1,667
Cash flows from investing activities							
Net purchases of investments	1,315	2,283	2,260	- 606	- 614	- 615	- 633
Acquisition of property and equipment	- 810	- 2,066	- 361	- 1,625	- 739	- 2,443	- 896
Acquisition of intangible assets	-	-	- 0	-	-	-	-
Net cash used in investing activities	505	216	1,900	- 2,232	- 1,353	- 3,058	- 1,530
Cash flows from financing activities	- 355	- 375	- 375	- 385	- 395	1,217	- 805
	-	-	-	-	-	-	-
Cash used in financing activities	- 355	- 375	- 375	- 385	- 395	1,217	- 805
Net increase in cash and cash equivalents	- 2,458	539	2,357	- 2,059	878	- 114	- 668
Cash and cash equivalents, beginning of period	3,840	1,528	1,382	3,739	1,680	2,557	2,444
Cash and cash equivalents, end of period	1,382	2,067	3,739	1,680	2,557	2,444	1,775

8.4 Statement of Capital Expenditures

Capital Expenditures

For the Year Ended December 31
($000's)

	RATE	ACTUAL 2016	PLAN 2017	PLAN 2018	PLAN 2019	PLAN 2020	PLAN 2021	PLAN 2022
BUILDINGS AND FLOATS	10 - 20							
Vancouver Building	years	-	-	-	-	-	-	-
Victoria Building		70	-	-	-	15	-	-
Victoria Floats		-	-	-	-	-	50	-
Prince Rupert Floats		-	-	200	-	-	-	-
		70	-	200	-	15	50	-
			-	-	-	-	-	-
PILOT BOATS			-	-	-	-	-	-
LAUNCHES	25		-	-	-	-	-	-
Pathfinder	years	-	-	43	-	60	-	-
Scout		-	-	10	-	60	-	-
Navigator		-	-	10	-	60	-	-
Chinook		-	-	-	75	-	60	-
PP#2		-	-	-	-	-	-	-
PP#4		-	-	50	-	-	50	-
New Launch / Helicopter		-	-	30	-	-	-	-
Electronic Upgrades			60	-	-	-	60	100
		-	60	143	75	180	170	100
			-	-	-	-	-	-
ENGINES	10,250		-	-	-	-	-	-
Pathfinder	hours	-	-	600	-	-	-	-
Scout		-	300	-	-	-	300	-
Navigator		-	-	300	-	-	-	-
Chinook		-	-	-	-	-	300	-
PP#2		-	-	-	-	-	-	-
PP#4		-	-	-	-	-	-	-
New Launch / Helicopter		83	-	-	-	-	-	-
		83	300	900	-	-	600	-
			-	-	-	-	-	-
GENERATORS	10		-	-	-	-	-	-
Pathfinder	years	-	-	100	-	-	-	-
Scout		-	85	170	-	-	-	-
Navigator		-	-	-	-	-	-	100
Chinook		-	-	-	-	100	-	-
PP#2		-	-	-	-	-	-	-
PP#4		-	-	-	-	-	-	-
New Launch / Helicopter		-	-	-	-	-	-	-
		-	85	270	-	100	-	100
TOTAL LAUNCHES		83	445	1,313	75	280	770	200

Capital Expenditures

For the Years Ended December 31
(000s)

	RATE	ACTUAL 2016	PLAN 2017	PLAN 2018	PLAN 2019	PLAN 2020	PLAN 2021	PLAN 2022
COMMUNICATION AND OTHER	4 - 10							
Furniture and office equipment	years	-	2	2	2	2	2	2
Telephone voice recorder		-	-	-	-	-	-	-
Pilot VHF radios		-	40	40	40	40	40	40
		-	42	42	42	42	42	42
COMPUTERS AND SOFTWARE	3							
BCCP training video software	years	-	-	-	-	-	-	-
Dispatch and billing software		-	3	3	550	2	-	2
Portable Pilotage Units		497	30	30	30	2,000	30	30
Board software		-	-	-	-	-	-	-
GPS systems		-	-	-	-	-	-	-
Simulators	5 years	-	-	-	20	100	-	-
Office PCs			15	22	22	5	5	5
Website Upgrade				16				
Launch fleet management software		-	-	-	-	-	-	-
		497	48	71	622	2,107	35	37
LEASEHOLD IMPROVEMENTS	10							
Vancouver & Victoria	years	15	-	-	-	-	-	-
		15	-	-	-	-	-	-
TOTAL CAPITAL EXPENDITURES		$666	535	1,626	739	2,443	897	278

Note: The Pacific Chinook is not owned by the Authority but the Authority has provided the capital associated with this vessel. From an accounting perspective, the vessel is consolidated into the financial statements of the Authority based on control and it is therefore included in this listing as an asset.

It should be noted that the Authority is in the process of evaluating the future requirements of the launch program (through the planning years to fiscal 2030). This plan includes an evaluation of the locations, the replacement requirements and whether the launches should be owned by the Authority or provided by an independent industry operator. As has been done in the past, once a plan is formalized, and a launch is identified with known costs, the Authority will consult with industry extensively in order to gain full uncontested support (as was done with the Pacific Chinook). At that time, a launch replacement fee will also be created and implemented. Accordingly, as this plan is only in its formative stages, no launch replacement costs have been accounted for in this Corporate Plan; but it should be known that costs may be included at a later stage once the launch replacement plan is formalized and brought to industry.

9. Incident Reporting

The Authority categorizes incidents and accidents and the associated reporting into three types of investigations. An incident or accident will not be classified until sufficient facts are available to assess the potential for safety improvements and may require on-site evaluation or interviews.

Class "A" Investigations/Incidents

Defines an investigation that has a high probability of improving navigation safety, in that there is a significant potential for reducing the risk to persons, vessels or the environment.

Class "B" Investigations/Incidents

Defines an investigation that has a medium probability of improving navigation safety, in that there is a moderate potential for reducing the risk to persons, vessels or the environment.

Class "C" Investigations/Incidents

Defines an investigation that has a low probability of improving navigation safety, in that there is a limited potential for reducing the risk to persons, vessels or the environment.

The following table shows the actual number of incidents the Authority has recorded over the last five years.

Year	Incident Free Assignments	Total Incidents	Class A	Class B	Class C
2009	99.950%	6	0	2	4
2010	99.984%	2	0	0	2
2011	99.962%	5	0	0	5
2012	99.946%	7	0	3	4
2013	99.963%	5	0	0	5
2014	99.962%	5	0	2	3
2015	99.992%	1	0	0	1
2016	99.958%	5	0	0	5

10. Human Resources

For the years ended December 31 (FTEs)	2014	2015	2016	2017
Fraser River Pilots	8	8	8	8
Dispatch	15	15.5	13	15.5
Launch Personnel	34	35	35	36.5
Management & Administrative	15	15	15	15
Total	72	73.5	71	75

11. Capital Budget 2018

11.1 Capital Budget 2018 Commentary

The Authority's threshold for capitalization is $10,000 per expenditure. The capital expenditures for the budget year of 2018 total $1.6 million.

Buildings & Floats

The Authority has budgeted $200,000 for the purchase of new floats.

Engines

The Authority has budgeted $600,000 for an engine overhaul for the Pacific Pathfinder and $300,000 for an engine overhaul for the Pacific Navigator.

Generators

The Authority has budgeted $100,000 for a generator replacements for the Pacific Pathfinder and $170,000 for the Pacific Scout.

11.2 Capital Budget 2019-2022 Commentary

Computers and software

The 2019 capital budget includes $550,000 which is allocated for the upgrade of the dispatching software to a new N-Tier platform.

The 2020 budget includes $2,000,000 for the costs of replacement of the existing suite of PPUs which will have reached the end of their useful lives.

Pilot Vessel

The Authority has also budgeted $6,000,000 in fiscal 2019 for the purchase of a new pilot vessel.

Engines

The 2021 capital budget includes $600,000 for the overhaul of the Pacific Scout and the Chinook.

12. Approvals and Restricted Transactions

12.1 Auditor General of Canada

The Auditor General of Canada (OAG) is the Authority's external auditor. As such, the OAG performs an annual audit and a special examination at least once every ten years. The OAG's annual audit report forms an integral part of the Authority's annual report, which is presented to the Minister of Transport and tabled in Parliament.

During 2015 the Authority received the results of the latest special examination by the OAG. Their report noted ***"In my opinion, based on the criteria established, there is reasonable assurance that during the period covered by the examination there were no significant deficiencies in the Pacific Pilotage Authority's systems and practices that we selected for examination. The Corporation has maintained these systems and practices in a manner that provides it with reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively."***

The Authority's management has developed financial systems and operational controls that facilitate monitoring of the Authority's affairs. These systems and controls are under ongoing scrutiny with a view to improvement or change as circumstances dictate.

12.2 Internal Audit

Deloitte & Touche LLP were appointed internal auditors during the year 2005. To date they have completed numerous engagements covering accounting controls, risk management and

identification, computer systems vendor search, travel and transportation expenses for pilots, Stage I of the new computer system, the electronic filing system, the yacht waiver process, a billing system review and information technology security.

On an annual basis the Authority will adopt an internal audit plan that will include both financial and risk-based assignments. A grid of potential assignments has been prepared and will be prioritized on an annual basis by the Board of Directors, in part based upon risk ranking as well as other criteria that may be appropriate.

The Authority will periodically review our internal audit services firm and this may result in a change for the next scheduled internal audit.

12.3 Minister of Finance Approvals

Pursuant to section 127 of the *Financial Administration Act* the Authority is submitting borrowing requests as follows:

1. Operating Line of Credit – renewal

The Authority requests to borrow, on a day-to-day basis from its bank, sums of money to manage its cash flow. The Authority views these borrowings as a 'best business practice' and wishes to renew this facility. These borrowings are to be charged at market rates levied by a Canadian bank and repaid prior to December 31. Currently, approved and signed by the Minister of Finance, the Authority has approval to borrow up to $6.75 million.

The Authority has, in an effort to return as much surplus as possible to industry, reduced its cash balance consistently over the past 4 years and expects the cash balance to reduce to less than $2 million in fiscal 2018 and foresees no material increase in the planning years.

	Actual 2014	Actual 2015	Actual 2016	Plan 2017	Plan 2018	Plan 2019	Plan 2020	Plan 2021	Plan 2022
Cash Balance	$ 7.2	$ 3.8	$ 1.4	$ 3.7	$ 1.7	$ 2.6	$ 2.4	$ 1.8	$ 1.9
Investments	$ 4.5	$ 4.0	$ 2.4	$ 0.5	$ 1.1	$ 1.7	$ 2.3	$ 2.9	$ 3.6
Total	$ 11.7	$ 7.8	$ 3.8	$ 4.2	$ 2.8	$ 4.3	$ 4.7	$ 4.7	$ 5.5

Considering the Authority forecasts that it will incur losses in each of the planning years, any unknown factors outside of the Authority's control (i.e. tariff delays, volume changes, unforeseen engine breakdowns) may have the ability to push the Authority's expected cash position well below its forecasted balance.

In addition, given the cyclicality of the Authority's business, the ramp up in assignment volumes in the end of spring tends to put excess pressure on the Authority's cash position. There are periods during this ramp up in which the Authority must issue payments in excess of $8 million per month which are only recovered afterward. Owing to the fact that the Authority's mandate is

to be financially self-sufficient, having an available line of credit on which to draw from with the Authority's currently eroding cash balance is necessary.

2. Capital Loan

The Authority makes no request for any additional borrowing. The Authority continues to pay down an existing capital loan ($2.6 million at December 31, 2016).

12.4 Borrowing Plan Summary

The Authority's overall borrowing plan follows and is submitted at $9 million for 2018.

1. Operating line of credit – $6.75 million
2. Capital loan - $2.25 million

The following table shows the Authority's borrowing for the plan years.

	Actual 2016	Actual 2017	Plan 2018	Plan 2019	Plan 2020	Plan 2021	Plan 2022
Operating line of credit	$ 5.0	$ 6.8	$ 6.8	$ 6.8	$ 6.8	$ 6.8	$ 6.8
Capital loans	$ 2.6	$ 2.2	$ 1.8	$ 1.4	$ 2.7	$ 1.8	$ 1.0
Capitalized leases	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	$ 7.6	$ 9.0	$ 8.6	$ 8.2	$ 9.5	$ 8.6	$ 7.8

According to PC Number: 2006-0176, dated 2006-03-30, "*Her Excellency the Governor General in Council, on the recommendation of the Minister of Transport, the Minister of Finance and the Treasury Board, hereby... (b) pursuant to section 36 of the Pilotage Act, fixes the maximum amount of money that can be borrowed at any time by the Pacific Pilotage Authority, in Canada or elsewhere, for the purpose of defraying its expenses, at CDN $9,568,000.*"

12.5 Investment Policy

The Investment Policy of the Authority is pursuant to section 37 of the *Pilotage Act* and reviewed annually. This policy incorporates fiduciary and financial responsibility within the confines of the *Pilotage Act* and the *Financial Administration Act*. The Authority's current investment portfolio includes Government of Canada Bonds, Canada Housing Trust Bonds and Canada Mortgage and Housing Corporation Bonds. All investments are relatively short-term obligations of or guaranteed by Her Majesty in Right of Canada. Investments must be rated equivalent to, or higher than, the Dominion Bond Rating Service (DBRS) rating for Government of Canada bonds. Investments with such a rating that are put on credit watch (negative implications) are not allowed.

13. Implementation of Travel and Hospitality Order in Council

On July 16, 2015, Crown corporations were directed by the Governor-in-Council (GIC) to align their policies, guidelines and practices with Treasury Board policies, directives and related instruments on travel, hospitality, conference and event expenditures in a manner that is consistent with their legal obligations.

The Authority has implemented the Order in Council effective August 1, 2015, and made the following key changes:

- Management travel and accommodation has been changed from a per diem basis to actual expenses for commercial accommodation while travelling on PPA business.
- Meal allowances are based on Treasury Board guidelines as of April 1, 2015 and will be adjusted on April 1 and October 1 annually in line with the published Treasury Board guidelines.

Below is a listing of the total average annual Board expenditures for each of travel, hospitality, and conference fees over the last three fiscal years ($000's):

- Travel - $67
- Hospitality - $0
- Conference - $0
- Fees and Allowances - $161

Forecasted expenditures for each of these categories each fiscal period over the planning period are as follows:

- Travel - $55
- Hospitality - $0
- Conference - $0
- Fees and Allowances - $160

In addition, the Authority itemizes and publicly discloses its CEO and Board Chair expenses on its website. This is all part of the corporation's approach to improving transparency and communication to the public on its management of travel and hospitality expenditures, including the implementation of the proactive disclosure of travel and hospitality expenses.

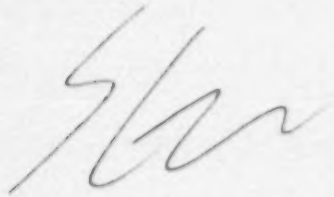
14. CFO Attestation

In my capacity as Chief Financial Officer of the Pacific Pilotage Authority, I have reviewed the Corporate Plan and Budget(s) and the supporting information that I considered necessary, as of the date indicated below. Based on this due diligence review, I make the following conclusions:

1. The nature and extent of the financial and related information is reasonably described and assumptions having a significant bearing on the associated financial requirements have been identified and are supported;
2. Significant risks having a bearing on the financial requirements, the sensitivity of the financial requirements to changes in key assumptions, and the related risk-mitigation strategies have been disclosed;
3. Financial resource requirements have been disclosed and are consistent with the stated assumptions, and options to contain costs have been considered;
4. Funding has been identified and is sufficient to address the financial requirements for the expected duration of the Corporate Plan;
5. The Corporate Plan and Budget(s) are compliant with relevant financial management legislation and policies, and the proper financial management authorities are in place (or are being sought as described in the Corporate Plan);
6. Key financial controls are in place to support the implementation of proposed activities and ongoing operation of the parent Crown Corporation.

In my opinion, the financial information contained in this Corporate Plan and Budget(s) is sufficient overall to support decision making;

CFO signature:



Date: September 7, 2017